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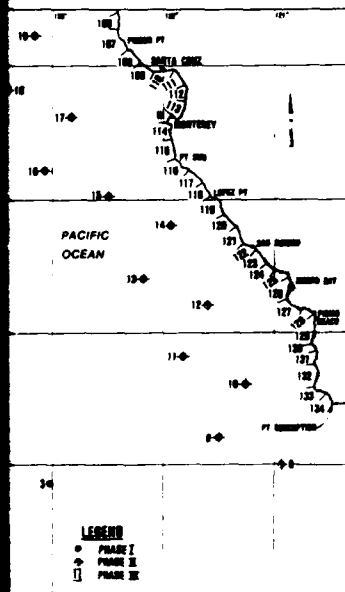
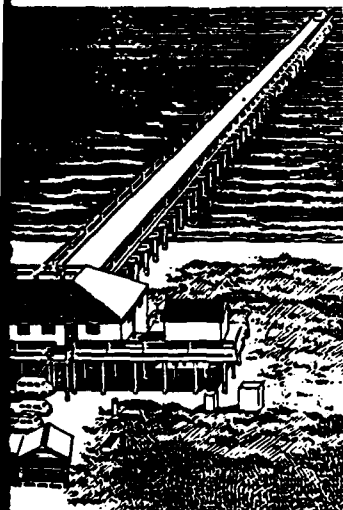
PACIFIC COAST HINDCAST PHASE III NORTH WAVE INFORMATION

by

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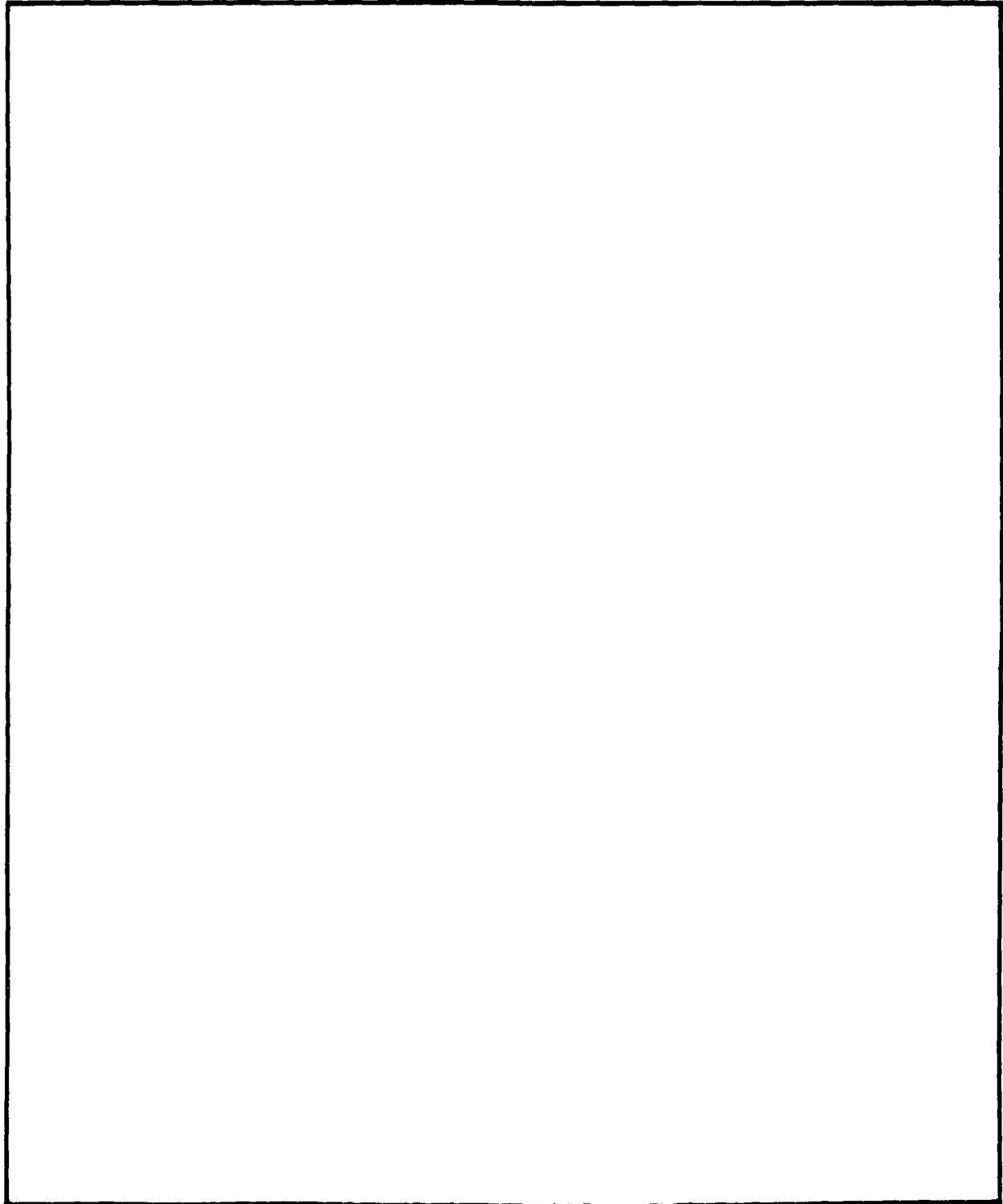
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Preface

In late 1976 a study to produce a wave climate for US coastal waters was initiated at the US Army Engineer Waterways Experiment Station (WES). The Wave Information Study (WIS) was authorized by the US Army Corps of Engineers (USACE) as part of the Coastal Field Data Collection Program which was managed by the WES Coastal Engineering Research Center (CERC). Messrs. John Housley, James E. Crews, Charles W. Hummer, and John H. Lockhart, Jr., USACE, are Technical Monitors for the Coastal Field Data Collection Program; Mr. J. Michael Hemsley is Program Manager; and Dr. Jon M. Hubertz is WIS Project Manager.

This report, the seventeenth in a series, presents hindcast shallow-water wave data for the US Pacific coasts of Washington, Oregon, and California north of Point Conception. This report was prepared by Drs. Robert E. Jensen and Jon M. Hubertz and Ms. Jane B. Payne. Dr. C. E. Abel (deceased), Ms. Barbara A. Tracy, and Dr. Paul D. Farrar contributed mainly to the technical modeling aspects of the study; Mr. William D. Corson, and Mses. Dani S. McAneny and Rebecca M. Brooks to the production of numerical results; and Mses. Payne and Benita Jo Groves to the production of tabular output. The final draft was prepared by Ms. Victoria L. Edwards. All of the above were or are members of the WIS staff in the Coastal Oceanography Branch (CR-O), Research Division (CR), CERC, and are responsible for completion of this study along with the authors of this report.

The study was conducted under direct supervision of Dr. Edward F. Thompson, former Chief, CR-O, and Mr. H. Lee Butler, Chief, CR; and under general supervision of Dr. James R. Houston, and Mr. Charles C. Calhoun, Jr., Chief, and Assistant Chief, CERC. This report was edited by Ms. Shirley A. J. Hanshaw, Information Technology Laboratory, Information Products Division, WES.

During report publication COL Dwayne G. Lee, EN, was Commander and Director of WES. Dr. Robert W. Whalin was Technical Director.



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PACIFIC COAST HINDCAST PHASE III NORTH

WAVE INFORMATION

Introduction

1. The wave climatology along the US Pacific coast was calculated in three phases:

- a. Phase I - Numerical hindcast of deepwater wave data from historical surface atmospheric pressure and wind velocity data on a 120 nautical-mile (222-km) grid.
- b. Phase II - Numerical hindcast on a 30-nautical-mile (55-km) grid to better resolve the sheltering effects of continental geometry. Phase I data serve as the boundary conditions at the seaward edge of the Phase II grid.
- c. Phase III - Transformation of Phase II wave data into shallow water, with simplifying assumptions.

Figure 1 presents a schematic of the three phases.

2. Phase III wave estimates have been computed for 134 shoreline segments 10 miles (16 km) in length along the Pacific coast from the United States-Canadian border to Point Conception, California (Appendixes A-E).^{*} The beginning and ending latitude and longitude of each shoreline segment, the angle of the segment, and a description of location are given in Table 1. Significant wave height, dominant spectral period, and mean direction at a depth of 10 m have been calculated every 3 hr for 1956-1975. Coastal regions which could not be represented by straight line 10-mile- (16-km) long segments were omitted and are denoted by "N" for null points (pages A2, B2, C2, D2, and E2). Any differences in the wave characteristics caused by fluctuations in the water depth (due to tides and surges) were neglected. Waves generated from tropical storms and Southern Hemisphere swell (waves originating in the Southern Hemisphere) were excluded in the analysis and will be the subject of future reports. Wave conditions for the 20-year period have been stored on the Wave Information Study (WIS) Sea State Engineering Analysis System (SEAS) for the 134 numbered stations shown on pages A2, B2, C2, D2, and E2. SEAS is

^{*} The Southern California Bight area (south of Point Conception to the US-Mexican border) will be treated as an independent wind and wave hindcasting effort, and a separate report documenting the wave climatology will be published.

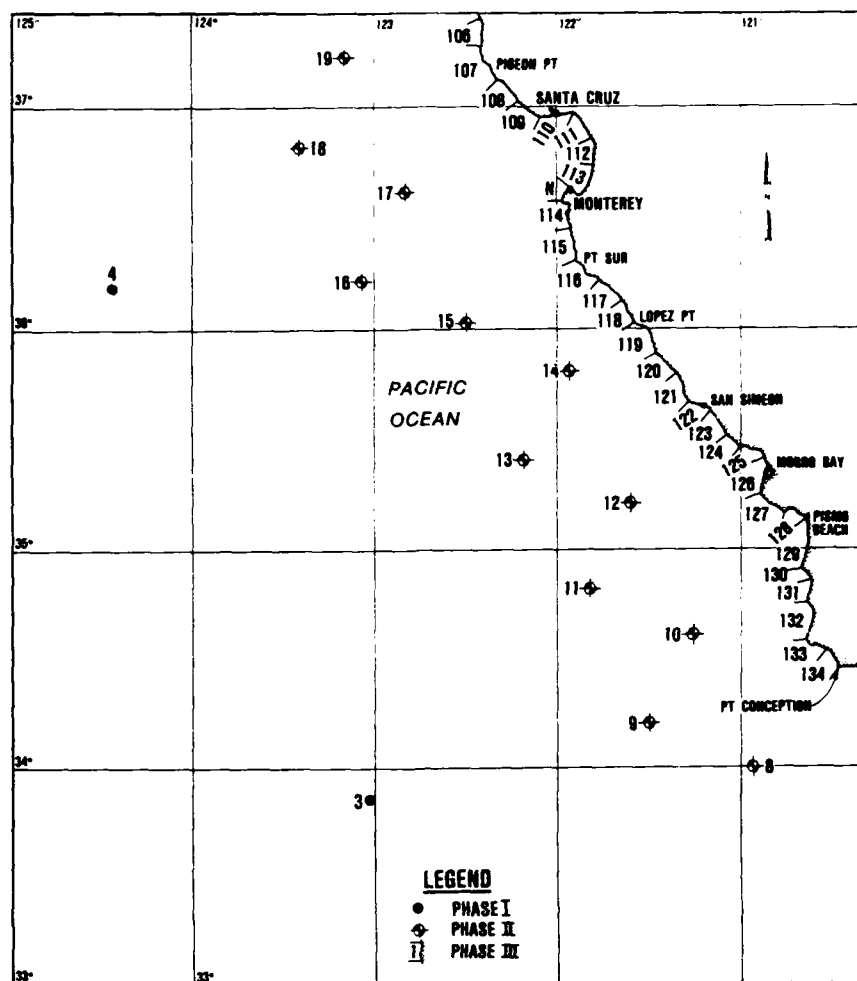


Figure 1. Schematic diagram illustrating the three phases of the study

an on-line computerized database system which allows users to produce reports and statistical analyses of WIS data tailored to their specific needs (McAneny 1986).

3. This report presents various analyses of the Phase III hindcast wave data and is similar in format to the Phase II data report (Corson et al. 1986, 1987). The products in this report are intended to serve only as a general indication of wave characteristics such as height, period, and direction since the methodology is limited by simplifying assumptions. The qualifications of this wave information are discussed in more detail in the section titled "Gage Data Comparisons." Separate reports describing technical aspects of the effort involved in these wave calculations have been published previously (Corson, Resio, and Vincent 1980; Corson and Resio 1981; Resio 1982; Jensen 1983; Tracy 1982; Resio and Tracy 1983).

4. The Phase III wave information was generated using a different procedure from that in Phase I and II. Phase I and II wave information was generated from a numerical wave model which simultaneously generated, propagated, and transformed waves over a discrete grid. This approach was not employed for the nearshore wave case because of computational costs. The Phase III wave data were generated assuming straight and parallel bottom contours with a uniform slope offshore. Sheltering of waves by large-scale coastal features was subjectively determined (see Table 2). Smaller-scale coastal features were ignored. No additional energy sources were added between existing Phase II wave conditions and the 10-m depth. Water level variations due to storm surge and tide are not included. The assumed water level is mean lower low water. Waves generated from hurricanes and Southern Hemisphere storms are not included. A single wave period is reported which is the period associated with the peak of the sea or swell part of the two-dimensional spectrum containing the largest amount of energy, that is, the dominant part of the spectrum. This period is not necessarily the same as the peak spectral period associated with the frequency band with the highest energy (see Figure 2). The sea part of the spectrum in Figure 2 contains more total energy than the swell part. Thus, the dominant period is T_{p1} , while the period band with the highest energy contains the peak of the swell with peak period T_{p2} . The direction reported is the mean direction associated with the dominant portion of the spectrum. The information in this report is

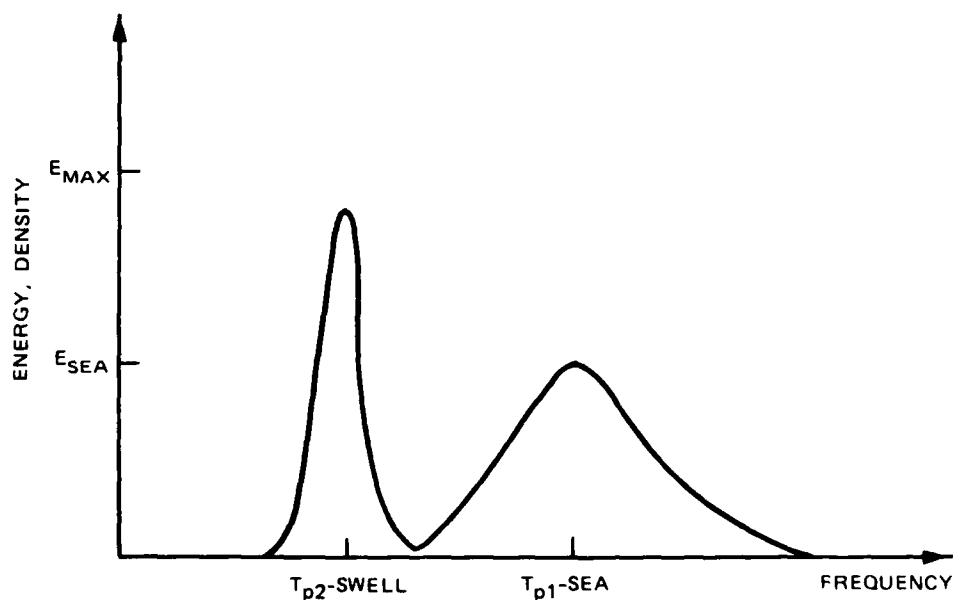


Figure 2. Comparison of sea and swell sections of spectrum

qualified by the above factors and should only be used to provide a general indication of the wave climate at this depth under the above restrictions. On the majority of west coast sites, a more detailed transformation should be done for project studies.

5. There were two steps in the calculation of the shallow-water wave climate. First, the Phase II sea wave parameters, significant height, peak period, and mean direction (H_s , T_p , and D_m) were used to calculate parametrically a two-dimensional (frequency and wave direction) discrete spectrum. Only the wave energy in direction bands ± 90 deg to shore normal for a given Phase III station were retained. Swell was assumed to be unidirectional and monochromatic. If the deepwater swell mean direction was not within ± 90 deg to shore normal, swell was ignored. The second step assumed that the two wave populations, sea and swell, were independent; thus, the analysis of the sea and swell transformation into 10 m could be carried out separately. The transformation mechanisms common to both populations were refraction, shoaling, wave breaking, and wave sheltering (when applicable). One additional mechanism involved in the sea wave transformation was wave-wave interaction, which allowed transfer of wave energy across frequency bands due to nonlinear interactions.

6. In certain cases along the coast, the assumption of straight and parallel offshore contours does not apply. Sheltering effects associated with the geometry of the coastline introduce significant deviations from results derived for a straight coastline approximation. The amount of wave sheltering depends upon the location of the input Phase II station (relative to the given Phase III segment being considered) and the location of the Phase II land boundary points relative to the actual shoreline. Angles with respect to the Phase III coastal segments were subjectively determined. These angles defined a window for wave energy to arrive at the coast. Wave energy outside this window was ignored. The shoreline orientation for each Phase III station was measured clockwise in degrees from true north (0 deg) (Figure 3). Table 2 displays the values of sheltering angles used in the analysis of the shallow-water wave climate. This report is intended only to serve as a general indication of wave characteristics such as height, period, and direction. The wave data represent generalized conditions along each 10-mile (16-km) shoreline segment. Any man-made structures, or bottom topographic features smaller than the 10-mile (16-km) shoreline segments, were ignored. Details concerning

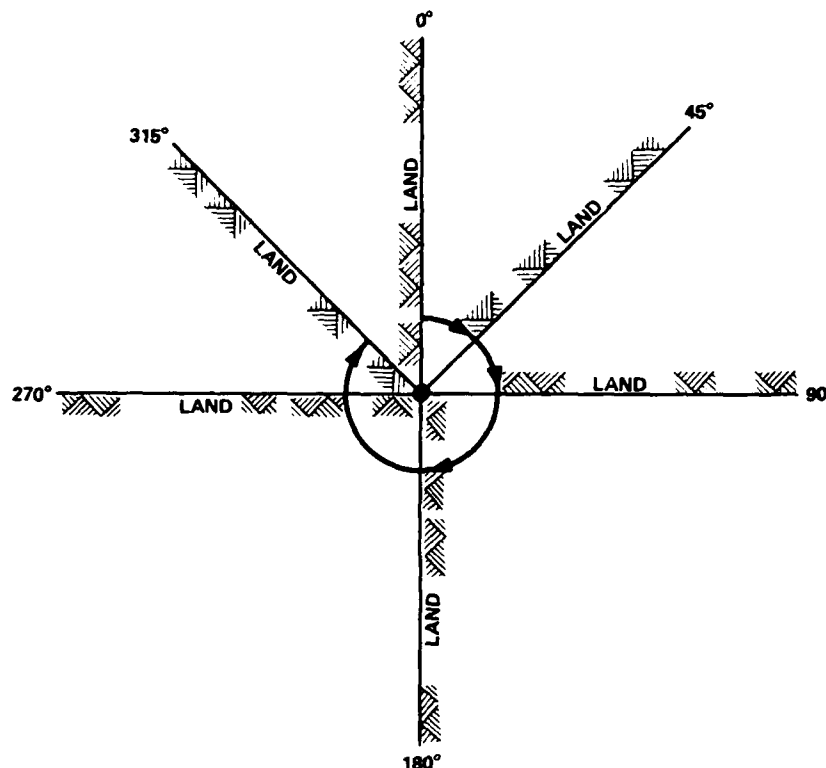


Figure 3. Schematic representation of the shoreline orientation
the Phase III wave calculations are given in WIS Report 8 (Jensen 1983).

7. The significant wave height H_s represents the combined sea and swell, that is, the square root of the sum of the squares of the sea and swell significant wave heights $H_s = (H_{swell}^2 + H_{sea}^2)^{1/2}$. The wave period T_p and mean direction D_m represent the dominant wave (i.e., if the sea H_s is larger than the swell H_s , then the sea T_p and D_m are given). The value of the wave direction is the mean direction from which the waves are coming relative to the shoreline orientation (Figure 4).

8. All products presented in this report are valid under the assumptions governing the Phase III method. For detailed studies on time dependent or steady state problems, it is recommended that the Corps offices utilize the more generalized models of WIS. Sea and swell wave parameters from this study are available to non-Corps users through the National Climatic Data Center as are those for Atlantic coast WIS data (Brooks and Corson 1984).

9. Four products are presented in this report:

- a. Twenty-year percent occurrence tables.
- b. Wave rose diagrams.
- c. Mean and maximum H_s tables.

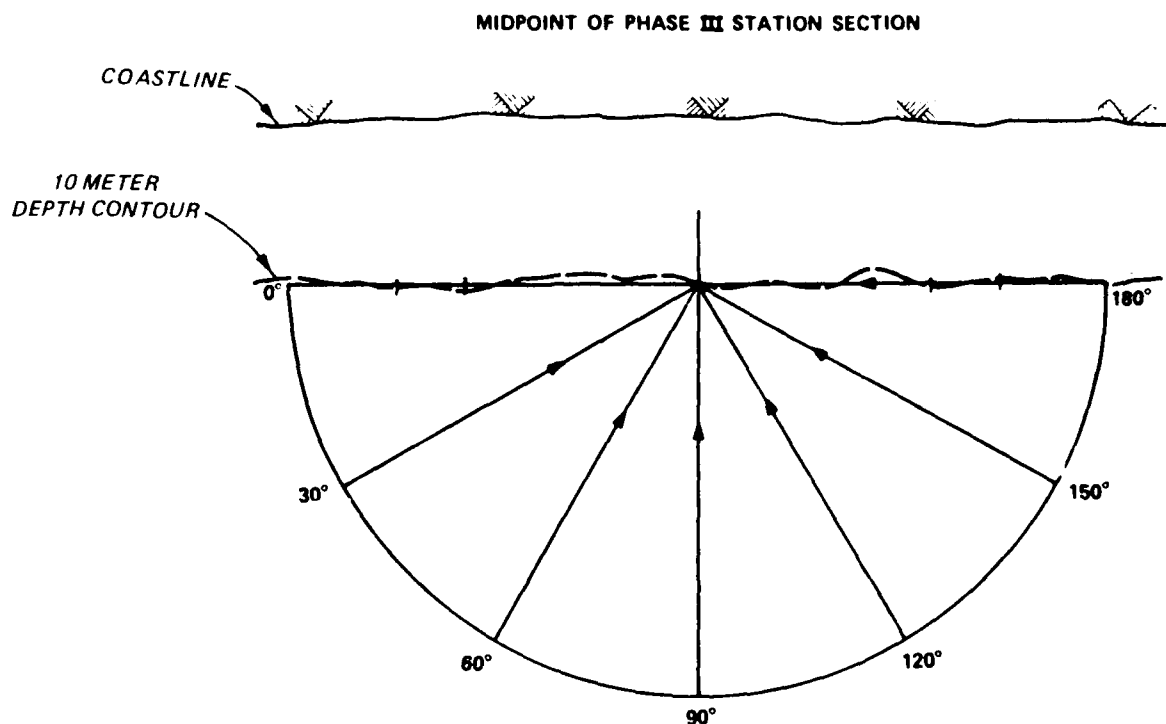


Figure 4. Coordinate system defining the direction of wave propagation D_m

- d. Return period tables, including the mean and standard deviation of H_s , the mean T_p , and the mean D .

A brief description of each product is given, and additional sections are provided on use of the products, including examples. The percent occurrence tables, the wave rose diagrams, and the mean and largest H_s tables are provided for each individual station in Appendixes A-E. These appendixes are arranged by geographical regions (pages A2, B2, C2, D2, and E2). The return period table provides information for all stations and is presented in Appendix F (Table F1).

20-Year Percent Occurrence Tables

10. Two types of tables are printed, 20-year azimuth tables and 20-year all direction tables. These data are based on the full 20-year Phase III hindcast record. The azimuth tables give the percent occurrence of waves in height and period ranges for different direction bands at all Phase III stations. The title to each table identifies the station, wave approach direction range, latitude and longitude of the two end points of the coastal

segment, shoreline angle (relative to true north), and water depth. The wave period ranges are based on the discrete frequency bands used in the deepwater wave hindcast. The height ranges are in half-meter increments. The direction ranges span ± 15 deg from a central direction and are referenced to the shoreline orientation (Figure 4). Values in the direction tables which have been multiplied by 1,000 represent the percent of the 20 years that waves occur from the specified direction bands for the indicated height and period ranges. Totals are provided by height and period range in the last column and row of each table, respectively. The last line in each direction table contains the following information for the specified direction range:

- a. Mean wave height.
- b. Largest wave height.
- c. Mean dominant period.
- d. Total number of occurrences in the specified direction range.

11. The all-directions table is printed after the 165- to 180-deg direction table. The all-direction table gives the percent occurrence of significant waves within specified height and period ranges coming from all directions for 20 years for the indicated station. Values in the all-directions table are derived from all preceding directional tables for the full 20 years. There are always 58,440 cases analyzed, but not all cases result in finite wave conditions. By definition, a "calm" condition exists in the Phase III data set if both sea and swell significant wave heights are zero. A two-dimensional spectrum in frequency and direction is generated from the Phase II sea wave characteristics (H_s , T_p , D_m). The energy density distribution over the discrete direction bands is assumed to be symmetric about the mean direction D_m and distributed ± 90 deg from D_m . If the mean direction in the Phase II data is directed offshore, the sea significant wave height found for Phase III data is equal to zero. If the swell mean direction of wave propagation in Phase II is directed offshore, a zero swell significant wave height results for Phase III. Wave sheltering could also limit propagation from an offshore region to the shore. Therefore, the total sum for all occurrences at a given station may not be 100 percent, the difference being due to calm wave conditions.

Use of tables

12. The 20-year percent occurrence tables have been developed to produce estimates of wave conditions under the aforementioned assumptions and

constraints. An example is provided below.

Example

13. To find the number of hours that waves between 3.0 and 3.5 m and 9.6 to 10.5 sec are expected to occur from 45 to 74.9 deg relative to the shoreline at sta 1 for the 20-year interval, the value read in the table for specified station, direction of wave propagation, height, and period should first be divided by 1,000, which, for this example, yields 0.090 percent (Appendix A, page A3). Then 0.090 is divided by 100 to give the probability and multiplied by the number of hours for the 20-year period (approximately 8,766 hr per year) to yield the number of hours that the specified wave is expected to occur. The simple process is:

- a. Locate the appropriate direction range table (for this case 45-74.9 deg).
- b. Locate the percent occurrence for specified height and period range.
- c. Divide percent occurrence found in step b by 1,000.
- d. Divide result of step c by 100.
- e. Multiply the result of step d by specified number of hours.

For this example:

$$\frac{\text{value read in table}}{1,000} \div 100 \times \text{number of hours in time interval} = \text{number of hours specified wave is expected to occur}$$

$$\frac{90}{1,000} \div 100 \times 175,320 = 158 \text{ hr}$$

14. The all-directions tables can be used in a similar fashion. To find the number of hours waves between 3.0 and 3.5 m are expected to occur within a year for sta 1 for all directions and periods, one must use the following procedure:

- a. Divide the value in the total column for the specified H_s range by 100, yielding a percentage of 9.42 (page A5).
- b. Divide 9.42 by 100 to get the probability.
- c. Multiply by the number of hours in 1 year, i.e.,

$$\frac{942}{100} \div 100 \times 8,766 = 826 \text{ hr}$$

15. To find the percentage of calms for the 20-year hindcast record at sta 1 (page A5), one must

- a. Sum the total column for all height ranges and divide by 100, yielding a percentage of 99.63.
- b. Subtract 99.63 from 100. This results in 0.37 percent of the wave conditions that are considered calm at sta 1, or approximately 216 calm wave conditions $(0.37/100) \times 58,440$.

Wave Rose Diagrams

Description

16. The wave rose diagrams use H_s and D_m for the 20 years of hindcast data to show the percentage of waves occurring from the separate directions. Similar to most wave rose diagrams, the width of each bar segment indicates the H_s range, and the length of the bar segment indicates the percent occurrence of waves from a specified direction. The distance between each circle in the diagram is 10 percent. Each leg of the diagram represents 22.5 deg to either side of the primary direction of the leg (except for 0 and 180 deg). For example, in Appendix A (page A5) the leg identified as 90 (or shore normal wave propagation) represents waves coming from 67.5 to 112.5 deg relative to the shoreline. The legs identified as 0 and 180 represent waves coming from 0 to 22.5 and 157.5 to 180 deg, respectively. The total percent in each angle class (found in the triangle at the end of each leg) is truncated at the nearest whole percent. When a <1 appears in the triangle, and the wave height class is represented by only one class, that total percent of wave conditions coming from the range of angle bands is considered to be equal to zero. For example, sta 1 displays a <1 in the legs identified as 0 and 180. The percent occurrences from these direction classes are equal to zero, with no waves coming from the above angles.

Use of the diagrams

17. The diagrams are intended as visual aids for quick qualitative interpretation of wave conditions. An example is provided below.

Example

18. The wave rose diagram for sta 1 indicates that in the 20-year hindcast 6 percent of the waves were propagating from 22.5 to 67.5 deg relative to the shoreline (or coming from a northeasterly direction relative to the shoreline). Of the 6 percent, approximately 2 percent were less than 0.5 m,

approximately 23 percent were between 0.5 and 1.0 m, approximately 37 percent were between 1.0 and 1.5, approximately 26 percent were between 1.0 and 1.5 m, approximately 26 percent were between 1.5 and 2.0 m, approximately 10 percent were between 2.0 and 2.5 m, and approximately 2 percent were between 2.5 and 3.0 m (page A5).

Mean H_s , Largest H_s , and 20-year Statistics Tables

Description

19. Two tables that summarize the mean and largest H_s for each month and year are provided for each station. The mean table also provides a mean monthly value and mean yearly value of H_s . The largest H_s table provides the largest H_s hindcast for each month in each year, as well as the largest H_s hindcast for the specified station. The 20-year statistics table provides the following:

- a. Mean H_s .
- b. Mean T_p .
- c. Most frequent direction band.
- d. Standard deviation of H_s .
- e. Standard deviation of T_p .
- f. Largest H_s .
- g. T_p of largest H_s .
- h. Mean direction of largest H_s .
- i. Date and time (Greenwich mean time) of largest H_s .

Use of the tables

20. The tables can be used as a quick reference in determining gross estimates of the wave climate of an area. Due to extreme variations in wave heights, the mean H_s value is of little use beyond gross estimates. The largest H_s value provides an idea of what extreme significant wave heights might occur. Appendix F can assist in determining how often to expect extreme values.

Example

21. To determine the mean H_s at sta 1 for January 1956, simply read the value in the specified column and row (page A6). The mean H_s for 1956 is given in the MEAN column opposite 1956. The mean H_s for all Januaries is given in the MEAN row under JAN as indicated below:

- a. The mean H_s for JAN 1956 = 3.5 m.
- b. The mean H_s for 1956 = 2.3 m.
- c. The mean H_s for all JAN's = 3.6 m.

The largest H_s table can be read in a similar fashion, and by scanning the columns and rows, additional information can be determined:

- a. The largest H_s for JAN 1956 = 6.1 m.
- b. The largest H_s for 1956 = 6.1 m.
- c. The largest H_s for all JAN's = 7.0 m.

Return Period for H_s Table

Description

22. Since extreme wave conditions are important in most coastal design procedures, a careful analysis of extreme wave heights was performed. To obtain a reasonably homogeneous, independent sample of wave heights for the analysis of wave extremes along the west coast, wave heights are first separated into events associated with particular meteorological conditions. Basically, the concept here is to obtain representative groupings of storm conditions before proceeding with the usual kind of statistical analysis of extremes. It should be noted that the extremal analysis for Phase III depends significantly on the water depth and that a constant depth of 10 m was used in this analysis. An upper limit on the maximum H_s will result, assuming no changes in water depth. A conservative approximation to this would be to assume $H_{s_{max}} = 7.8$ m (or $H_{s_{max}} = 0.78 \times \text{depth}$, via solitary wave theory).

For more detailed analyses, one would need to consider the changes in the water depth caused by storm surges and tides.

Use of Tables

23. One type of error that could affect the results of extremal analysis would be a bias between the hindcast waves for a station and waves occurring at that site. The assumption of constant water depth within the Phase III analysis will bias those storm conditions producing significant changes in the water depth (caused by surge effects), thus resulting in the capability of producing even larger H_s results (because of the depth dependence of the maximum H_s). Additionally, bias in the results can be expected in the extremal distribution if the random error in the transformation technique

employed in the Phase III analysis is larger compared with the expected natural variation in wave height. It is expected that the hindcast extremes presented in the tables (Appendix F) provide a valid representation of shallow-water extremes produced by extra-tropical storms along the US Pacific coast.

Gage Data Comparisons

24. A logical question to ask of any model study is: "How well do the model results represent what actually took place or might take place in nature?" Usually the answer can be found in discussions of calibration and verification for a particular study. How well the question can be answered depends on the number of measurements under prototype conditions that are available for comparison. In addition, the measurements should reflect the same quantity that the model calculates and at the same time and place as simulated by the model. The necessary prototype measurements, unfortunately, are not available to satisfactorily answer the question in this study. However, some information is available which can be used, although it does not represent exactly what was calculated by the wave model in this case; nor is it at the same time or place that model results are available.

25. The wave information transformed to the Phase III stations in this report was generated from the Phase I and II studies of the Pacific Ocean WIS Reports 14 and 16, respectively. The geographical areas covered by the numerical wave model grid in those studies is shown in Figure 2 of WIS Reports 14 and 16. Tropical storms and hurricanes were excluded from the wind field representations on these grids. Also, since the Phase I grid ended at the equator, any waves generated south of the equator which propagated to the north are not represented. Wave gages at the coast measure all incident waves regardless of origin. Thus, there is inconsistency in what was measured and what was calculated which will affect any comparisons between the two.

26. In addition, measurements in the Phase III region are available in the period from 1979 to the present, while the hindcast covers 1956 to 1975. Thus, it is not possible to plot calculated against measured variables as a function of time. That comparisons of mean values can be made if mean conditions do not change over time may or may not be a valid assumption. There is not enough information available to determine, for example, if the mean

wave height at a given location is the same for 1956-1975 as for 1975-1988. Even if the calculated and observed mean values were in agreement, this would not be conclusive because there is no assurance that the means were equal for the two periods.

27. Finally, the locations of measurements and calculated results are not the same. In the deep ocean location is not as much of a concern as it is close to the coast. Wave conditions are more homogeneous in the deep ocean where depth effects are absent. However, close to the coast, the depth at a gage site and the closest model grid point may vary by 100 percent or more. Local conditions near a gage such as complex bathymetry, shoals, reefs, currents from river discharges or sheltering from small-scale coastal features will all affect the local waves measured by a gage. These features, however, are not included in the wave calculations and thus would make any comparisons invalid.

28. There are a number of wave gages along the Pacific coast which can be used with the above qualifications to help answer the question of model validity. Some are National Oceanographic and Atmospheric Administration (NOAA) buoys, and others are Corps of Engineers (CE) gages. Since the gage data are not coincident in time with the model data, the best comparisons are of the distributions of variables such as wave height and period and comparisons of mean values. Percent occurrence graphs of wave height and period and monthly mean wave height at points along the coast where gage data are available are shown below. Cases where a gage was present but conditions were such that local effects clearly violated model assumptions are not shown.

29. There is a NOAA buoy (46010) and a CE wave gage near the border of Washington and Oregon. Their locations are shown in Figure 5. The gage is a pressure gage in 11 m of water with a period of record from 1983-1986 with 4,351 observations. The buoy is in 18 m of water with a period of record from 1979-1984 and 34,600 observations. These observations are compared, respectively, to WIS Phase III Stations 21 and 22 in Plates 1-6. (Station locations are shown on the second page of each appendix.) The distribution of heights at Ocean Park and WIS sta 21 are similar in character. The distribution of periods is similar, with WIS underrepresenting low and high periods. Monthly mean heights are similar, with the exception of the winter months when differences are as great as 1 m. This difference could in part be due to the much longer model time series (20 years) over which more extreme events could

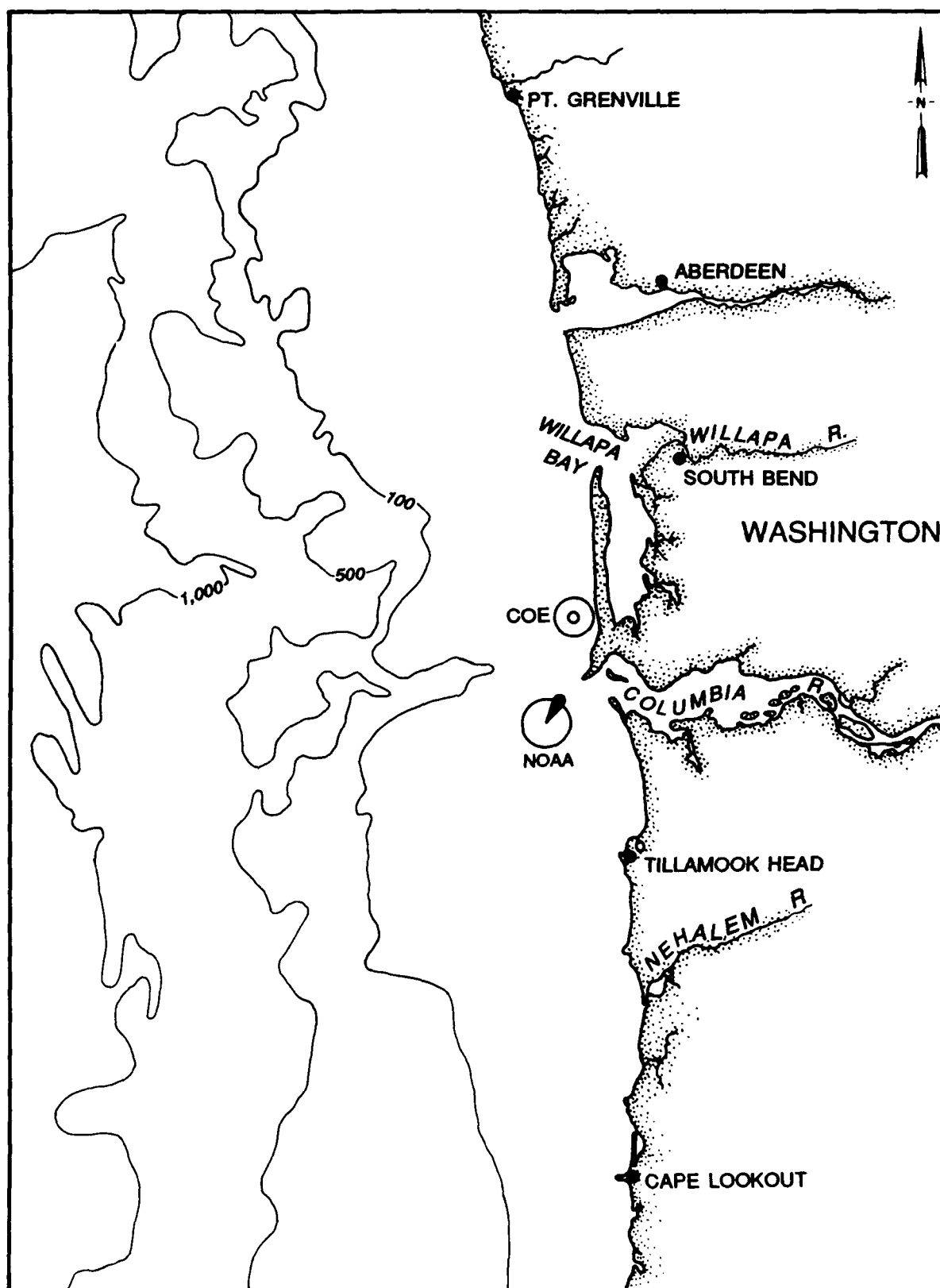


Figure 5. Locations of NOAA buoy 46010 and CE wave gage near the border of Washington and Oregon

occur and increase the mean. Comparisons between the NOAA buoy and WIS 22 are similar for heights and periods. The mean monthly WIS height is again somewhat larger in the winter months than indicated by the buoy.

30. Data (4,467 observations) are available from a CE pressure gage in 16 m of water off the mouth of the Coquille River in Oregon which coincides with WIS sta 48 (Figure 6). The percent distributions of height and period and monthly mean wave heights are shown, respectively, in Plates 7-9. The percent distribution of heights differ with the gage, indicating more occurrences of lower waves and less of higher waves with respect to WIS. The monthly means are smaller for all months for the gage at this location compared to WIS. This difference may be due to the many shoals and rocks in this area which could cause wave breaking and would thus result in a lower mean wave height than if they were absent, as is the case in the model representation region near mouth of Coquille River in Oregon. Bottom contours are hardly straight and parallel as assumed by the WIS Phase III computations. Low and high periods are underestimated by WIS compared to the gage data.

31. NOAA buoy 46022 is offshore of WIS sta 70 in 315 m of water with a period of record from 1982-1984 with 25,500 observations. The location is shown in Figure 7. The percent occurrence of wave height (Plate 10) is skewed slightly to higher waves for WIS than the buoy. Period distributions (Plate 11) are similar, and monthly mean heights (Plate 12) show about a half meter higher for WIS in the winter months. This slight bias toward higher waves for the WIS results may again be due to the longer period of record compared to the buoy.

32. NOAA buoy 46014 is offshore of WIS sta 84 in 285 m of water with a period of record from 1981-1984 with 32,400 observations. The location is shown in Figure 8. Comparisons of the distributions of wave height and period (Plates 13-15) are similar to those of the previous case.

33. NOAA buoy 46012 is offshore of WIS sta 105 in 73 m of water with a period of record from 1980-1984 with 32,500 observations. The location is shown in Figure 9. Comparisons of the distributions of wave height and period (Plates 16-18) are again similar to those of the two previous cases.

34. The final comparison is for NOAA buoy 46011 offshore of WIS sta 130 in 183 m of water with a period of record from 1980-1984 and 31,800 observations. The location is shown in Figure 10. The percent occurrences for height and period (Plates 19 and 20) favor lower heights and periods compared

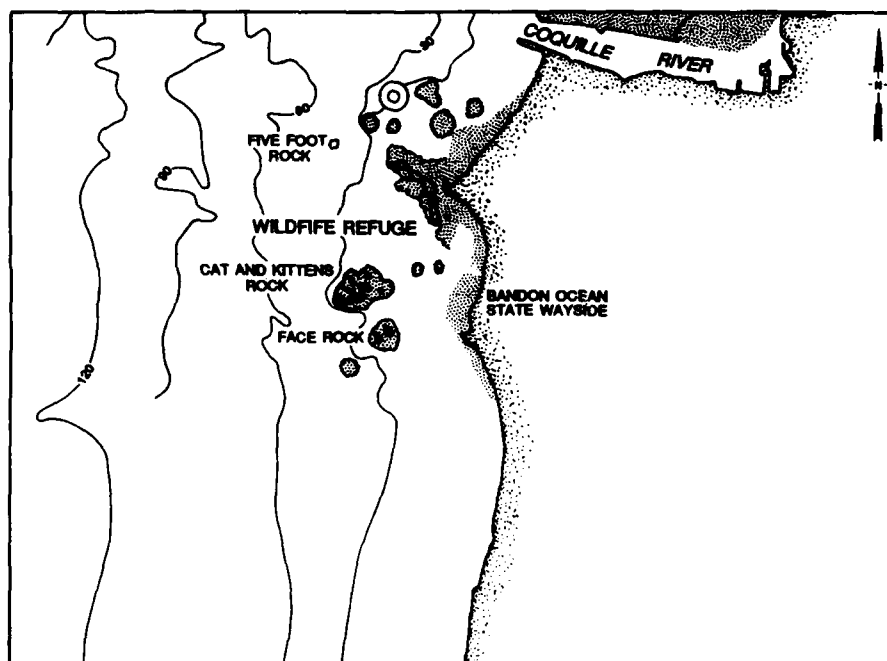
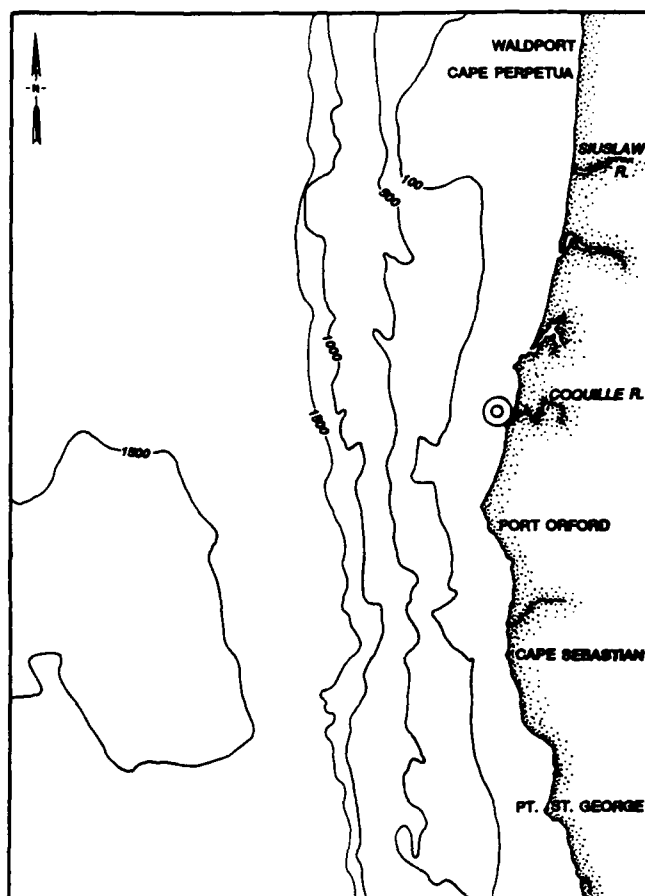


Figure 6. Data from CE pressure gage, 16 m of water, mouth of Coquille River, Oregon, sta 48

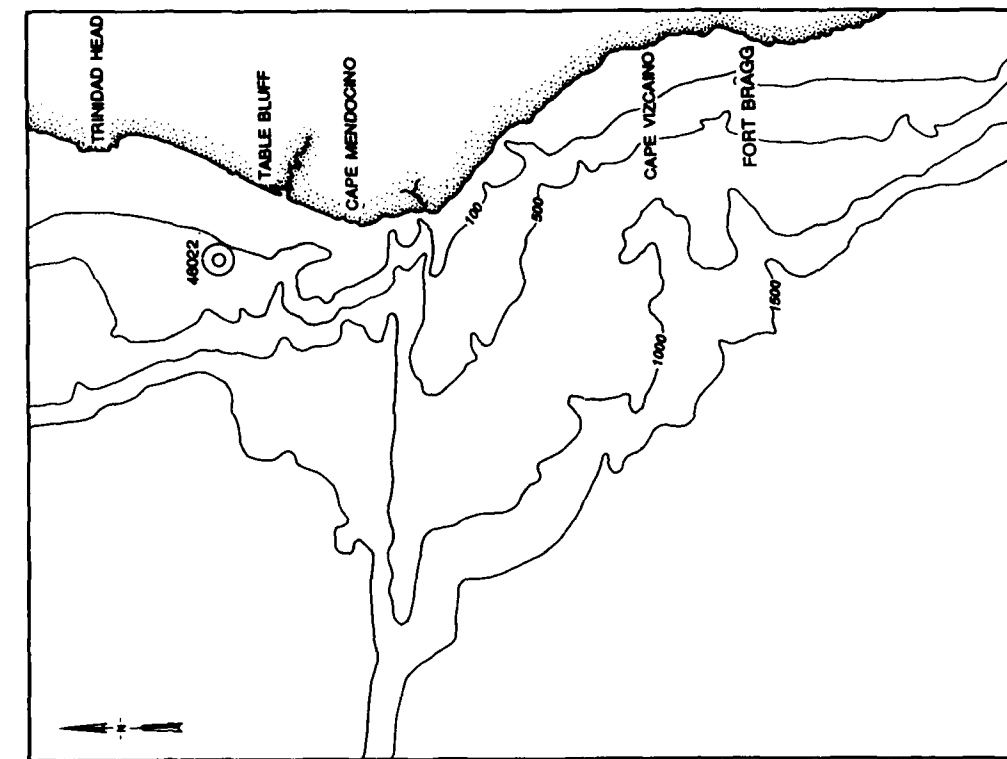


Figure 7. Location of NOAA buoy 46022, 315 m of water, sta 70, 1982-1984, 25,500 observations

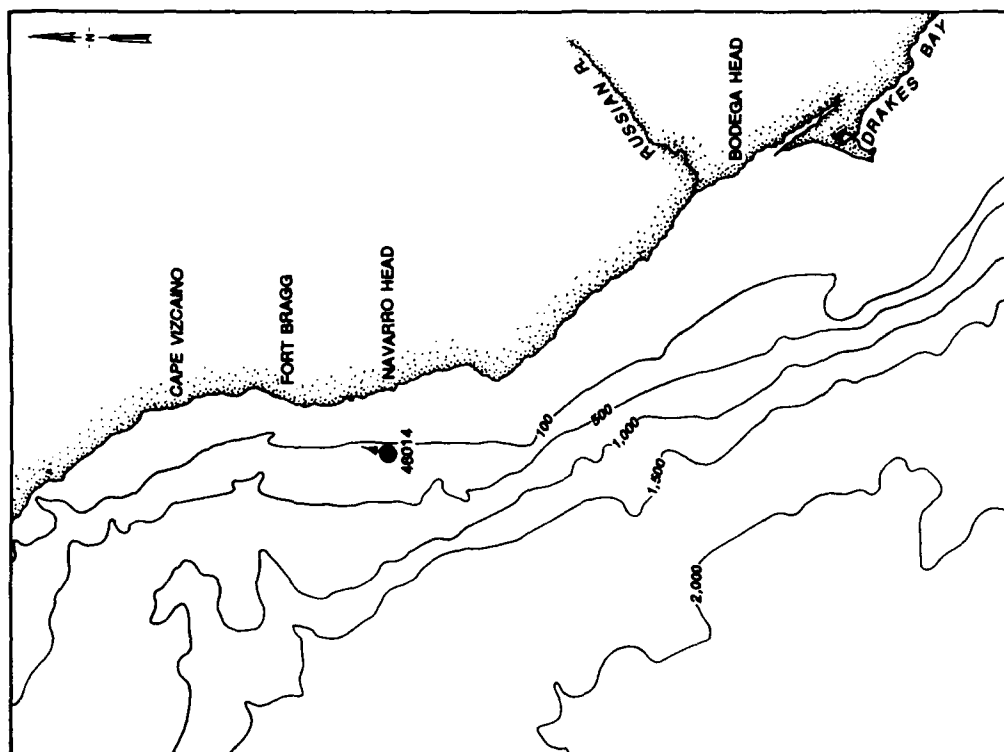


Figure 8. Location of NOAA buoy 46014, 285 m of water, sta 84, 1981-1984, 32,400 observations

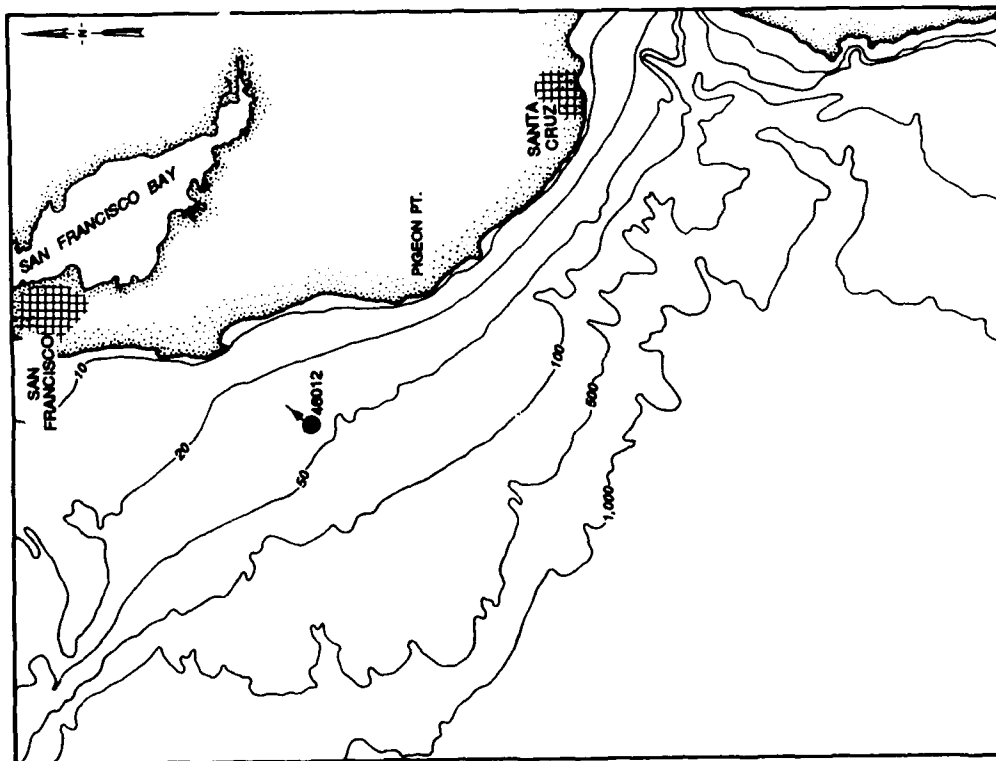


Figure 9. Location of NOAA buoy 46012, 73 m of water, sta 105, 1980-1984, 32,500 observations

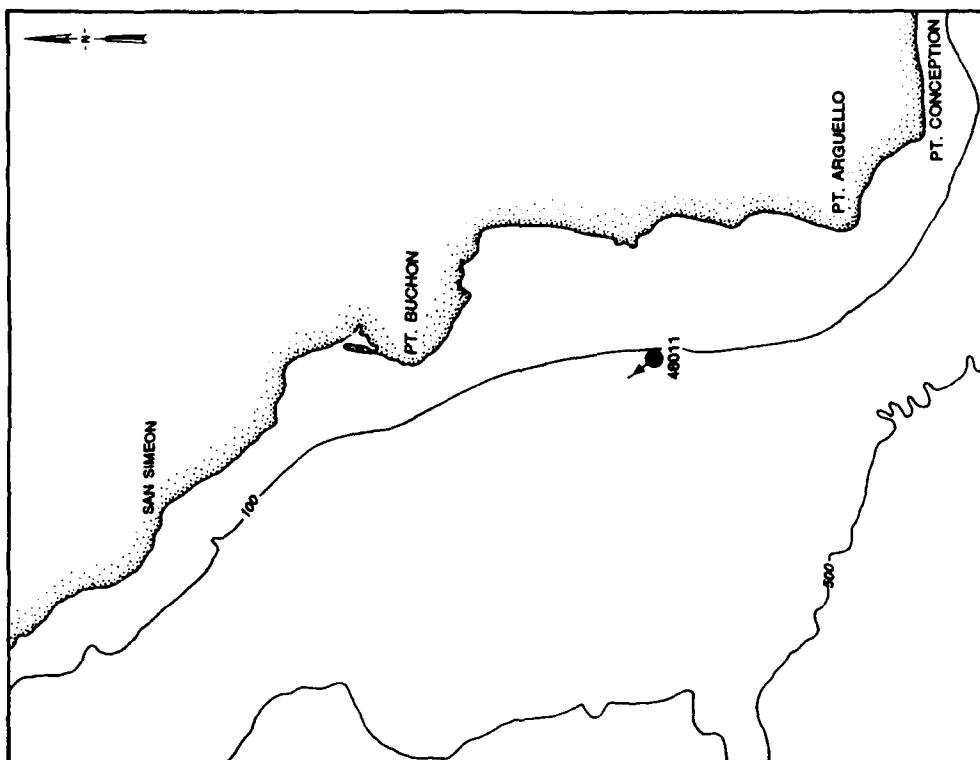


Figure 10. Location of NOAA buoy 46011, 183 m of water, sta 130, 1980-1984, 31,800 observations

to the gage, and in this case the monthly mean height (Plate 21) from the buoy is consistently above the estimate from WIS by about a half meter. This could be due to the sheltering imposed in the model versus the buoy's measuring waves from all directions since it is away from the sheltering effects of the coast.

35. The comparisons above are good enough to ensure that the hindcast results are distributed generally in the same shape as measured results despite the differences discussed above between the two data sets. There is some tendency for the hindcast to estimate fewer waves below 1.0 m than the gage data. Also, the hindcast estimates fewer waves with periods longer than 15.0 sec compared to the gages. In most cases, the hindcast overestimates the monthly mean for the winter months compared to the gage data. Hypotheses can be offered based on the differences in the quantities being compared to explain these tendencies, but more exact comparisons need to be done to completely verify the hindcast. These are planned as part of a WIS verification study where exact comparisons will be made.

36. Until more information is available, the present Phase III results should be used with caution. Phase III locations near reefs, river mouths, or with complex bathymetry such as offshore canyons or shoals or sheltered by land forms such as bays probably are not well represented by the simple Phase III model. Phase II wave information or gage data near such a site should be used to characterize wave conditions offshore, and a site-specific model should be used to transform wave conditions to the site of interest.

37. The present Phase III data are most useful to characterize the wave height, period, and direction at Phase III stations characterized by the model assumptions of straight, unsheltered coastlines with simple offshore bathymetry and the absence of reefs, shoals, and rivers which might affect local wave conditions. Reference to a coastal chart and some coastal engineering common sense should be sufficient to determine if the Phase III station data accurately represent wave climatology at the site. For example, sta 89-93 should be representative, but stations 94-105 should be used with caution.

38. This will be the final use of the Phase III methodology in WIS hindcasts. The present philosophy is to provide nearshore wave climatology at sites as needed using models which represent site-specific conditions. This approach will preclude cautionary guidance, as above, on use of the data.

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Table 1

Shoreline Points for Pacific Coast Phase III Wave Information Study

ST #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
1	48.37N/124.75W	48.30N/124.70W	160.	CAPE FLATTERY, WA
2	48.30N/124.70W	48.17N/124.75W	192.	PORTAGE HEAD, WA
3	48.17N/124.75W	48.06N/124.70W	166.	CAPE ALAVA, WA
4	48.06N/124.70W	47.96N/124.68W	168.	ABOUT 8 NAUTICAL MILES NORTH OF CAPE JOHNSON, WA
5	47.96N/124.68W	47.86N/124.61W	155.	CAPE JOHNSON, WA
6	47.86N/124.61W	47.83N/124.55W	125.	ABOUT 6 NAUTICAL MILES NORTH OF TOLEAK POINT, WA
7	47.83N/124.55W	47.76N/124.48W	148.	TOLEAK POINT, WA
8	47.76N/124.48W	47.70N/124.43W	149.	HOM HEAD, WA
9	47.70N/124.43W	47.60N/124.40W	166.	ABOUT 7 NAUTICAL MILES SOUTH OF HOM HEAD, WA
10	47.60N/124.40W	47.48N/124.35W	171.	ABOUT 22 NAUTICAL MILES NORTH OF CAPE ELIZABETH, WA
11	47.48N/124.35W	47.35N/124.33W	171.	ABOUT 12 NAUTICAL MILES NORTH OF CAPE ELIZABETH, WA
12	47.35N/124.33W	47.30N/124.28W	148.	CAPE ELIZABETH, WA
13	47.30N/124.28W	47.23N/124.23W	148.	POINT GRENVILLE, WA
14	47.23N/124.23W	47.13N/124.20W	167.	MOCLIPS RIVER, WA
15	47.13N/124.20W	47.01N/124.18W	173.	COPALIS HEAD, WA
16	47.01N/124.18W	46.93N/124.18W	174.	ABOUT 10 NAUTICAL MILES SOUTH OF COPALIS HEAD, WA
17	46.90N/124.15W	46.78N/124.11W	166.	POINT CHEHALIS, WA
18	46.78N/124.11W	46.71N/124.10W	174.	ABOUT 6 NAUTICAL MILES NORTH OF CAPE SHOALWATER, WA
19	46.61N/124.10W	46.50N/124.08W	176.	LEADBETTER POINT, WA
20	46.50N/124.08W	46.40N/124.08W	178.	OCEAN PARK, WA
21	46.40N/124.08W	46.26N/124.10W	190.	ABOUT 9 NAUTICAL MILES SOUTH OF OCEAN PARK, WA
22	46.21N/124.01W	46.10N/123.95W	158.	ABOUT 20 NAUTICAL MILES NORTH OF SEASIDE, WA
23	46.10N/123.95W	46.00N/123.93W	173.	ABOUT 10 NAUTICAL MILES NORTH OF SEASIDE, WA
24	46.00N/123.93W	45.95N/124.00W	192.	SEASIDE, WA
25	45.95N/124.00W	45.88N/123.96W	190.	TILLAMOOK HEAD, WA
26	45.88N/123.96W	45.76N/124.00W	184.	ABOUT 5 NAUTICAL MILES SOUTH OF TILLAMOOK HEAD, WA
27	45.76N/124.00W	45.65N/123.95W	168.	CAPE FALCON, WA
28	45.65N/123.95W	45.53N/123.96W	187.	ABOUT 10 NAUTICAL MILES SOUTH OF CAPE FALCON, WA
29	45.53N/123.96W	45.41N/123.96W	180.	CAPE MEARES, OR
30	45.41N/123.96W	45.30N/123.96W	180.	ABOUT 6 NAUTICAL MILES NORTH OF CAPE LOOKOUT, OR
31	45.30N/123.96W	45.18N/123.98W	180.	ABOUT 4 NAUTICAL MILES SOUTH OF CAPE LOOKOUT, OR
32	45.18N/123.98W	45.06N/124.01W	192.	ABOUT 10 NAUTICAL MILES NORTH OF CASCADE HEAD, OR
33	45.06N/124.01W	44.93N/124.03W	183.	CASCADE HEAD, OR
34	44.93N/124.03W	44.83N/124.08W	194.	ABOUT 10 NAUTICAL MILES SOUTH OF CASCADE HEAD, OR
35	44.83N/124.08W	44.70N/124.08W	180.	ABOUT 4 NAUTICAL MILES NORTH OF CAPE FOULWEATHER, OR
36	44.70N/124.08W	44.58N/124.08W	181.	NORTH OF YAUQUINA HEAD, OR
37	44.58N/124.08W	44.46N/124.08W	184.	ABOUT 7 NAUTICAL MILES SOUTH OF YAUQUINA HEAD, OR
38	44.46N/124.08W	44.35N/124.10W	185.	ABOUT 17 NAUTICAL MILES SOUTH OF YAUQUINA HEAD, OR
39	44.35N/124.10W	44.21N/124.11W	182.	ABOUT 17 NAUTICAL MILES NORTH OF HECETA HEAD, OR
40	44.21N/124.11W	44.10N/124.13W	181.	ABOUT 7 MILES NORTH OF HECETA HEAD, OR

(Continued)

(Sheet 1 of 4)

Table 1 (Continued)

ST #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
41	44.10N/124.13W	43.98N/124.15W	184.	SOUTH OF HECETA HEAD, OR
42	43.98N/124.15W	43.86N/124.16W	185.	SOUTH OF FLORENCE, OR
43	43.86N/124.16W	43.75N/124.20W	187.	ABOUT 10 NAUTICAL MILES SOUTH OF FLORENCE, OR
44	43.75N/124.20W	43.61N/124.23W	191.	ABOUT 4 NAUTICAL MILES NORTH OF REEDSPORT, OR
45	43.61N/124.23W	43.50N/124.26W	194.	ABOUT 6 NAUTICAL MILES SOUTH OF REEDSPORT, OR
46	43.50N/124.26W	43.31N/124.38W	207.	ABOUT 16 NAUTICAL MILES NORTH OF CAPE ARAGO, OR
47	43.31N/124.38W	43.20N/124.40W	182.	CAPE ARAGO, OR
48	43.20N/124.40W	43.08N/124.45W	190.	ABOUT 10 NAUTICAL MILES SOUTH OF CAPE ARAGO, OR
49	43.08N/124.45W	42.96N/124.48W	194.	COQUILLE POINT, OR
50	42.96N/124.48W	42.83N/124.56W	205.	ABOUT 11 NAUTICAL MILES NORTH OF CAPE BLANCO, OR
51	42.83N/124.56W	42.73N/124.51W	162.	CAPE BLANCO, OR
52	42.73N/124.51W	42.61N/124.40W	148.	PORT ORFORD, OR
53	42.61N/124.40W	42.46N/124.43W	184.	COLEBROOKE, OR
54	42.46N/124.43W	42.46N/124.43W	180.	ABOUT 10 NAUTICAL MILES NORTH OF CAPE SEBASTIAN, OR
55	42.35N/124.43W	42.25N/124.45W	176.	CAPE SEBASTIAN, OR
56	42.25N/124.45W	42.10N/124.35W	163.	ABOUT 12 NAUTICAL MILES NORTH OF CAPE FERRELO, OR
57	42.10N/124.35W	42.00N/124.21W	134.	CAPE FERRELO, OR
58	42.00N/124.21W	41.86N/124.21W	179.	ABOUT 4 NAUTICAL MILES NORTH OF PYRAMID POINT, CA
59	41.86N/124.21W	41.78N/124.26W	195.	ABOUT 6 NAUTICAL MILES SOUTH OF PYRAMID POINT, CA
60	41.78N/124.26W	41.71N/124.15W	128.	POINT ST. GEORGE, CA
61	41.71N/124.15W	41.58N/124.11W	163.	ABOUT 9 NAUTICAL MILES SOUTH OF POINT ST. GEORGE, CA
62	41.58N/124.11W	41.48N/124.08W	173.	ABOUT 19 NAUTICAL MILES SOUTH OF POINT ST. GEORGE, CA
63	41.48N/124.08W	41.35N/124.08W	179.	ABOUT 28 NAUTICAL MILES SOUTH OF POINT ST. GEORGE, CA
64	41.35N/124.08W	41.23N/124.11W	192.	ABOUT 16 NAUTICAL MILES NORTH OF RODGERS PEAK, CA
65	41.23N/124.11W	41.13N/124.16W	198.	ABOUT 7 NAUTICAL MILES NORTH OF RODGERS PEAK, CA
66	41.13N/124.16W	41.05N/124.15W	174.	SOUTH OF RODGERS PEAK, CA
67	41.05N/124.15W	40.98N/124.11W	163.	TRINIDAD HEAD, CA
68	40.98N/124.11W	40.86N/124.16W	196.	ABOUT 7 NAUTICAL MILES SOUTH OF TRINIDAD HEAD, CA
69	40.86N/124.16W	40.75N/124.25W	205.	ABOUT 9 NAUTICAL MILES NORTH OF EUREKA, CA
70	40.75N/124.25W	40.65N/124.31W	206.	EUREKA, CA
71	40.65N/124.31W	40.53N/124.36W	201.	ABOUT 10 NAUTICAL MILES SOUTH OF EUREKA, CA
72	40.53N/124.36W	40.43N/124.40W	196.	NORTH OF FALSE CAPE, CA
73	40.43N/124.40W	40.33N/124.35W	161.	CAPE MENDOCINO, CA
74	40.33N/124.35W	40.01N/124.35W	180.	ABOUT 6 NAUTICAL MILES NORTH OF PUNTA GORDA, CA
75	40.01N/124.35W	40.16N/124.25W	137.	PUNTA GORDA, CA
76	40.16N/124.25W	40.10N/124.13W	128.	ABOUT 10 NAUTICAL MILES SOUTH OF PUNTA GORDA, CA
77	40.10N/124.13W	40.01N/124.08W	153.	KING PEAK, CA
78	40.01N/124.08W	39.91N/123.91W	136.	POINT DELGADA, CA
79	39.91N/123.91W	39.83N/123.86W	140.	ABOUT 10 NAUTICAL MILES SOUTH OF POINT DELGADA, CA
80	39.83N/123.86W	39.71N/123.85W	169.	ABOUT 9 NAUTICAL MILES NORTH OF CAPE VILCAINO, CA

(Continued)

(Sheet 2 of 4)

Table 1 (Continued)

ST #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
81	39.71N/123.85W	39.60N/123.80W	167.	CAPE VIZCAINO, CA
82	39.60N/123.80W	39.48N/123.80W	183.	ABOUT 9 NAUTICAL MILES NORTH OF LAGUNA POINT, CA
83	39.48N/123.80W	39.35N/123.81W	185.	FORT BRAGG, CA
84	39.35N/123.81W	39.21N/123.78W	165.	POINT CABRILLO, CA
85	39.21N/123.78W	39.10N/123.70W	156.	NORTH OF NAVARRO HEAD, CA
86	39.10N/123.70W	39.01N/123.70W	168.	ABOUT 10 NAUTICAL MILES SOUTH OF NAVARRO HEAD, CA
87	39.01N/123.70W	38.95N/123.73W	200.	ABOUT 6 NAUTICAL MILES NORTH OF POINT ARENA, CA
88	38.95N/123.73W	38.83N/123.63W	146.	POINT ARENA, CA
89	38.83N/123.63W	38.73N/123.51W	135.	NORTH OF GUALALA MOUNTAIN, CA
90	38.73N/123.51W	38.63N/123.41W	137.	SOUTH OF GUALALA MOUNTAIN, CA
91	38.63N/123.41W	38.53N/123.30W	138.	ABOUT 30 NAUTICAL MILES SOUTH OF POINT ARENA, CA
92	38.53N/123.30W	38.43N/123.16W	127.	ABOUT 24 NAUTICAL MILES NORTH OF BODEGA HEAD, CA
93	38.43N/123.16W	38.36N/123.08W	146.	ABOUT 14 NAUTICAL MILES NORTH OF BODEGA HEAD, CA
94	38.36N/123.08W	38.31N/123.08W	180.	ABOUT 4 NAUTICAL MILES NORTH OF BODEGA HEAD, CA
95	38.31N/123.08W	38.20N/122.96W	143.	BODEGA HEAD, CA
96	38.20N/122.96W	38.08N/122.96W	180.	ABOUT 10 NAUTICAL MILES SOUTH OF BODEGA HEAD, CA
97	38.08N/122.96W	38.00N/123.01W	200.	ABOUT 7 NAUTICAL MILES NORTH OF POINT REYES, CA
98	38.00N/123.01W	38.00N/122.83W	90.	POINT REYES, CA
99	38.00N/122.83W	37.88N/122.71W	137.	ABOUT 11 NAUTICAL MILES SOUTH OF POINT REYES, CA
100	37.88N/122.71W	37.88N/122.63W	90.	SOUTH OF BOLINAS POINT, CA
101	37.88N/122.63W	37.81N/122.53W	132.	NORTH OF POINT BONITA, CA
102	37.81N/122.53W	37.66N/122.50W	171.	NORTH OF SAN FRANCISCO, CA
103	37.66N/122.50W	37.58N/122.51W	190.	SOUTH OF SAN FRANCISCO, CA
104	37.58N/122.51W	37.50N/122.48W	177.	POINT SAN PEDRO, CA
105	37.50N/122.48W	37.38N/122.41W	152.	SOUTH OF POINT MONTARA, CA
106	37.38N/122.41W	37.26N/122.41W	180.	ABOUT 11 NAUTICAL MILES SOUTH OF POINT MONTARA, CA
107	37.26N/122.41W	37.11N/122.31W	154.	NORTH OF PESCADERO POINT, CA
108	37.11N/122.31W	37.01N/122.21W	135.	POINT ANO NUEVO, CA
109	37.01N/122.21W	36.95N/122.08W	129.	ABOUT 9 NAUTICAL MILES SOUTH OF POINT ANO NUEVO, CA
110	36.95N/122.08W	36.96N/121.90W	80.	SANTA CRUZ, CA
111	36.96N/121.90W	36.85N/121.81W	144.	EAST OF SANTA CRUZ, CA
112	36.85N/121.81W	36.73N/121.81W	180.	ABOUT 13 NAUTICAL MILES SOUTHEAST OF SANTA CRUZ, CA
113	36.73N/121.81W	36.63N/121.93W	225.	ABOUT 10 NAUTICAL MILES NORTH OF POINT PINOS, CA
114	36.58N/121.96W	36.45N/121.93W	163.	MONTEREY, CA
115	36.45N/121.93W	36.28N/121.91W	172.	ABOUT 11 NAUTICAL MILES NORTH OF POINT SUR, CA
116	36.28N/121.91W	36.16N/121.75W	128.	POINT SUR, CA
117	36.16N/121.75W	36.11N/121.68W	132.	ABOUT 10 NAUTICAL MILES SOUTH OF POINT SUR, CA
118	36.11N/121.68W	36.03N/121.63W	151.	ABOUT 9 NAUTICAL MILES NORTH OF LOPEZ POINT, CA
119	36.03N/121.63W	35.86N/121.53W	146.	LOPEZ POINT, CA
120	35.86N/121.53W	35.76N/121.41W	135.	CAPE SAN MARTIN, CA

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(Sheet 3 of 4)

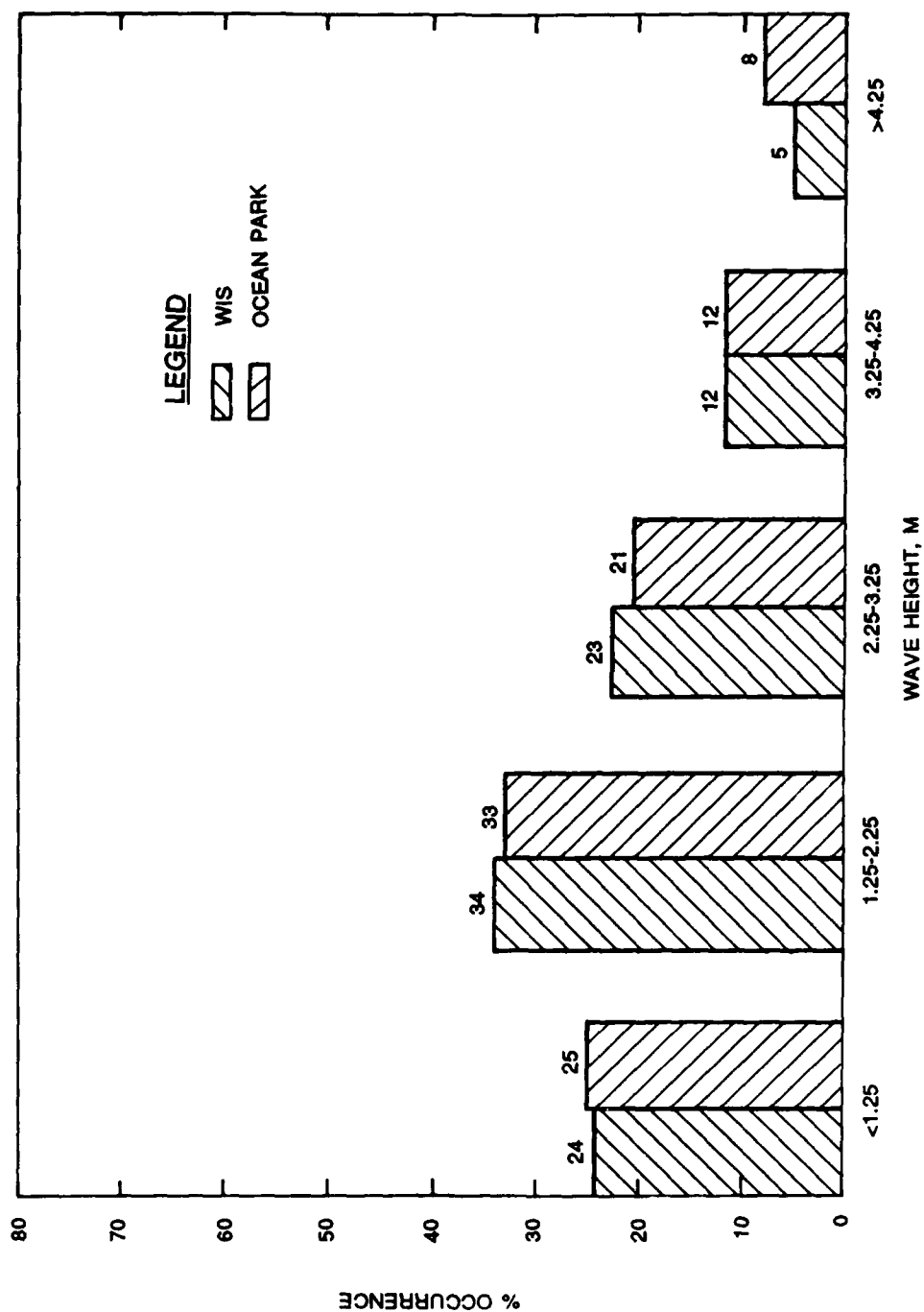
Table 1 (Concluded)

ST #	LAT 1 / LONG 1	LAT 2 / LONG 2	ANGLE	LOCATION
121	35.76N/121.41W	35.63N/121.35W	158.	ABOUT 10 NAUTICAL MILES SOUTH OF CAPE SAN MARTIN, CA
122	35.63N/121.35W	35.56N/121.26W	110.	POINT PIEDRAS BLANCAS, CA
123	35.56N/121.26W	35.46N/121.20W	147.	SAN SIMEON, CA, CA
124	35.46N/121.20W	35.45N/121.01W	133.	ABOUT 9 NAUTICAL MILES SOUTH OF SAN SIMEON
125	35.45N/121.01W	35.41N/120.91W	110.	POINT ESTERO, CA, CA
126	35.41N/120.91W	35.23N/120.88W	186.	ABOUT 9 NAUTICAL MILES SOUTH OF POINT ESTERO
127	35.23N/120.88W	35.16N/120.91W	126.	POINT BUCHON, CA
128	35.16N/120.81W	35.10N/120.65W	98.	AVILA BEACH, CA
129	35.10N/120.65W	34.85N/120.75W	182.	PISMO BEACH, CA
130	34.85N/120.75W	34.81N/120.68W	134.	POINT SAL, CA
131	34.81N/120.68W	34.73N/120.61W	190.	ABOUT 5 NAUTICAL MILES SOUTH OF POINT SAL, CA
132	34.73N/120.61W	34.60N/120.71W	183.	PURISIMA POINT, CA
133	34.60N/120.71W	34.53N/120.60W	119.	POINT ARGUELLO, CA
134	34.53N/120.60W	34.43N/120.46W	148.	POINT CONCEPTION, CA

Table 2
Sheltered Pacific Coast Phase III Stations

Station No.	Sheltered Angle, deg	Station No.	Sheltered Angle, deg
1	0-30;150-180	77	0-30
2	0-40	78	150-180
6	150-180	79	140-180
7	0-10; 160-180	80	0-30; 170-180
8	0-10; 160-180	81	0-20; 170-180
9	0-20	82	0-30
10	0-20	83	0-30
11	0-10	84	170-180
12	160-180	85	160-180
13	160-180	86	0-10; 160-180
14	0-10	87	0-30
15	0-10	92	160-180
16	0-10	93	0-10; 150-180
16 to 17	NULL	94	0-40
18 to 19	NULL	95	140-180
20	170-180	96	0-30;170-180
21	0-10	97	0-40
22	0-10; 160-180	98	130-180
21 to 22	NULL	99	0-40; 160-180
23	0-20; 160-180	100	110-180
24	0-30	101	0-20; 140-180
25	0-60	102	0-50; 170-180
26	0-10	103	0-60
27	170-180	104	0-30
28	0-10	105	160-180
29	170-180	106	0-20
31	0-20	108	160-180
32	0-10	109	150-180
43	170-180	110	90-180
44	170-180	111	0-40; 130-180
45	170-180	112	0-50; 150-180
46	1-10	113	0-70
47	170-180	113 to 114	NULL
48	170-180	114	0-10
49	170-180	115	0-20
50	0-10	116	170-180
52	160-180	117	0-20; 170-180
53	0-40	118	0-20
57	140-180	119	0-10
58	0-40; 160-180	120	170-180
59	0-20	121	0-20
60	150-180	122	140-180
61	0-30	123	0-20
62	170-180	124	160-180
63	0-10; 170-180	125	120-180
64	0-10	126	0-50
67	150-180	127	150-180
68	0-30; 170-180	128	110-180
69	0-20	129	0-40
70	0-10	130	140-180
71	0-10	131	0-40
73	170-180	132	0-20
74	0-20	133	140-180
76	160-180	134	150-180

% OCCURRENCE WAVE HEIGHT, M WIS 21 VS OCEAN PARK



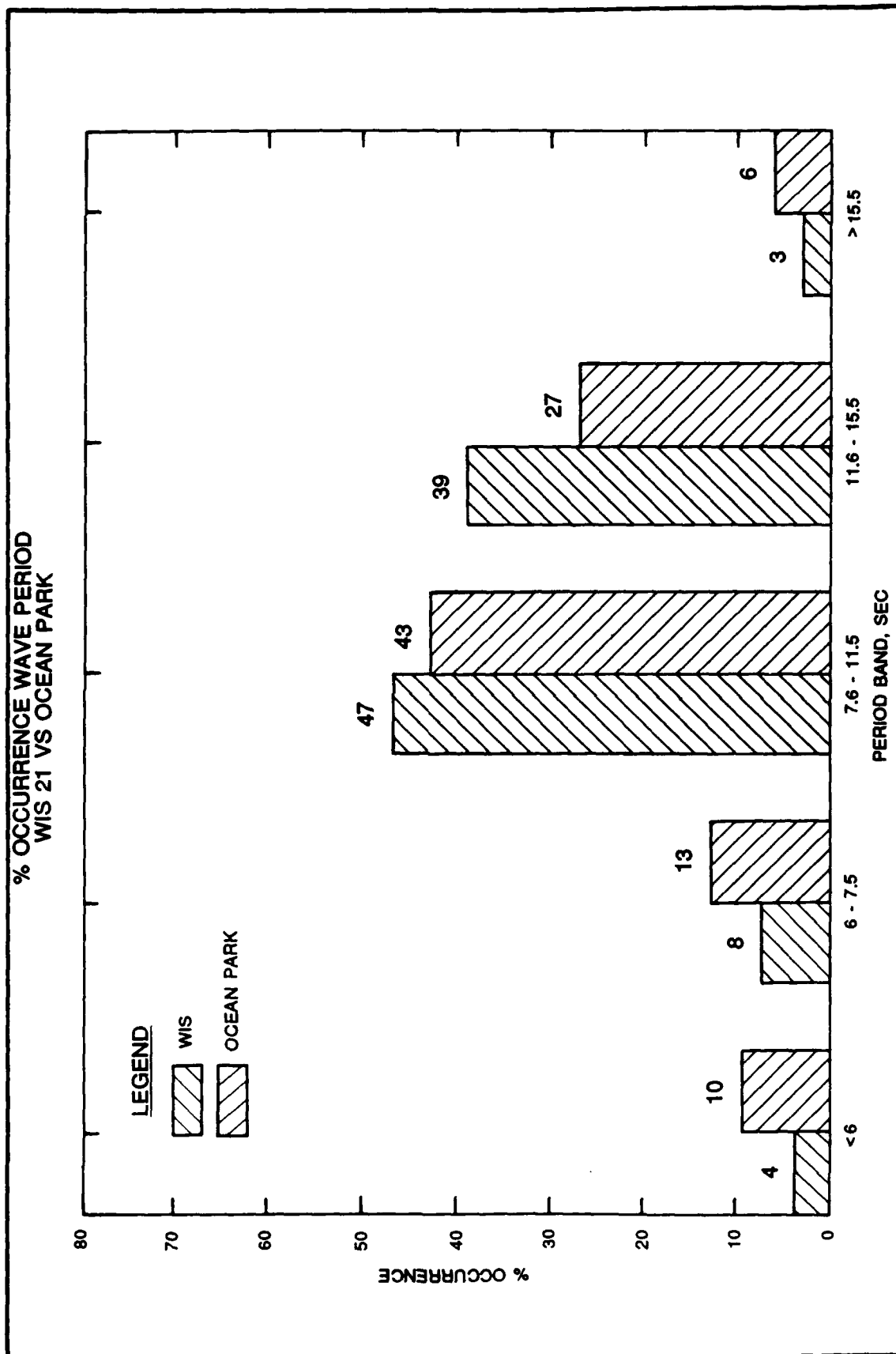
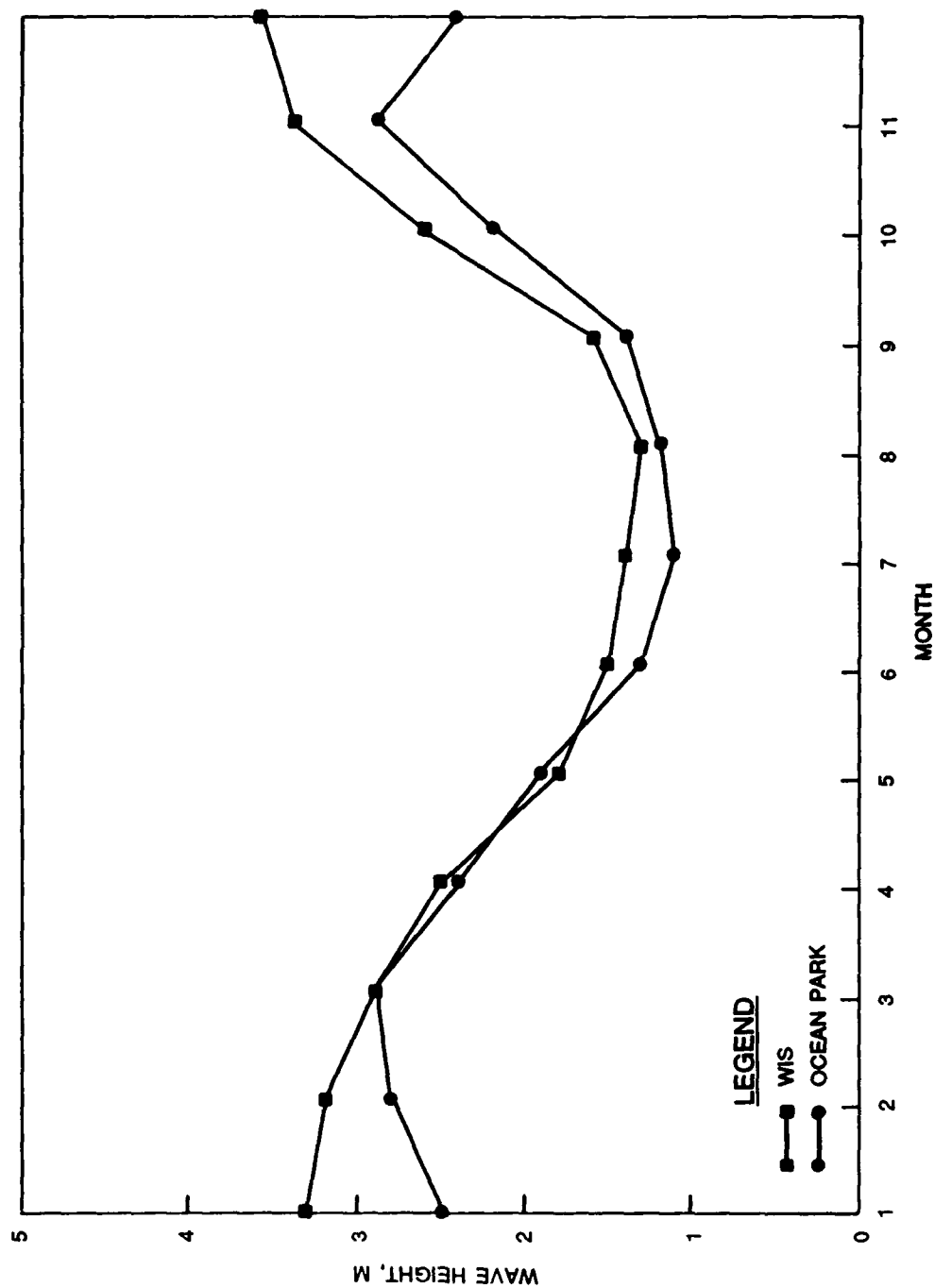
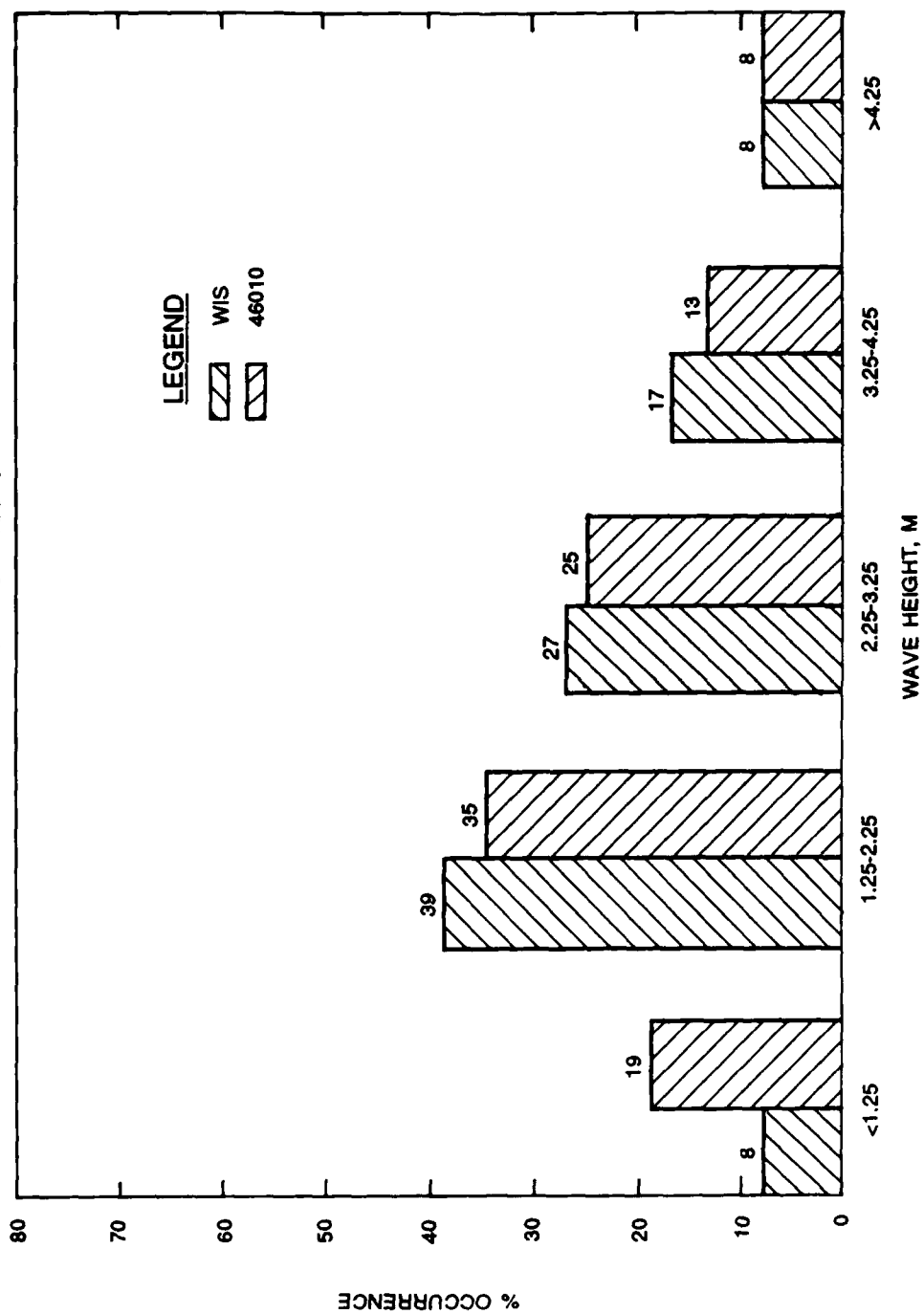


PLATE 2

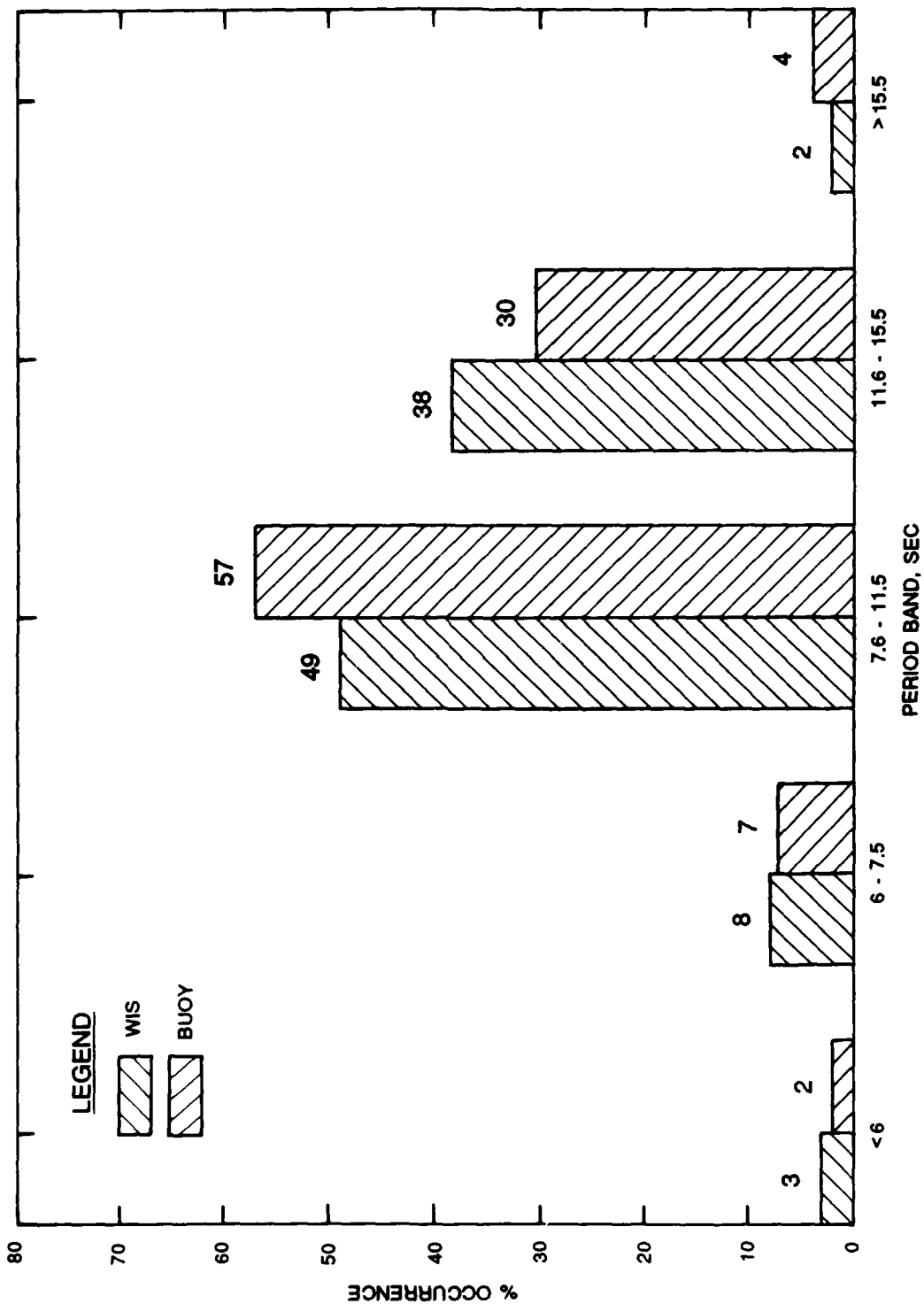
WIS 21 VS OCEAN PARK
MONTHLY MEANS

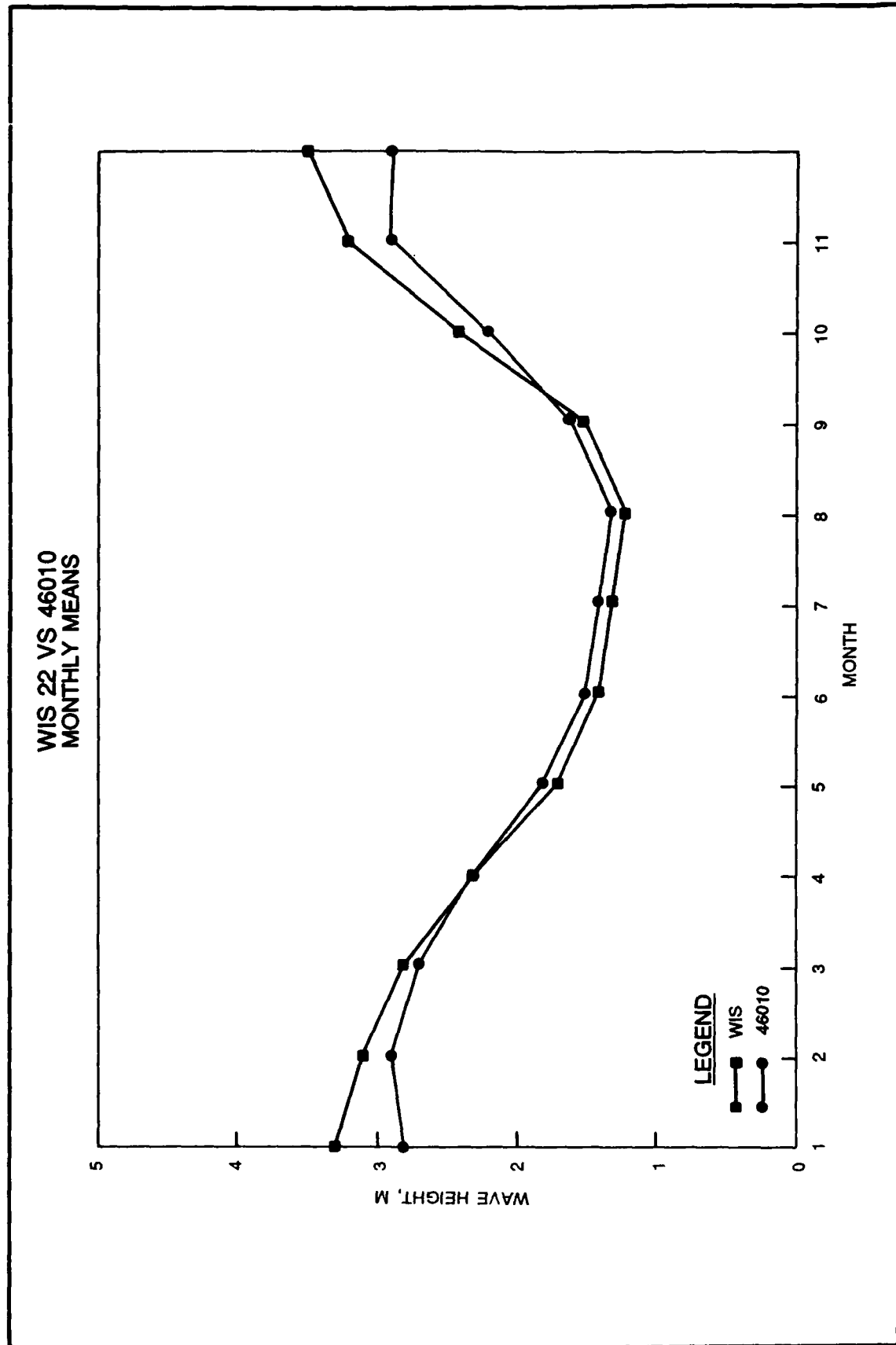


% OCCURRENCE WAVE HEIGHT, M WIS 22 VS BUOY 46010

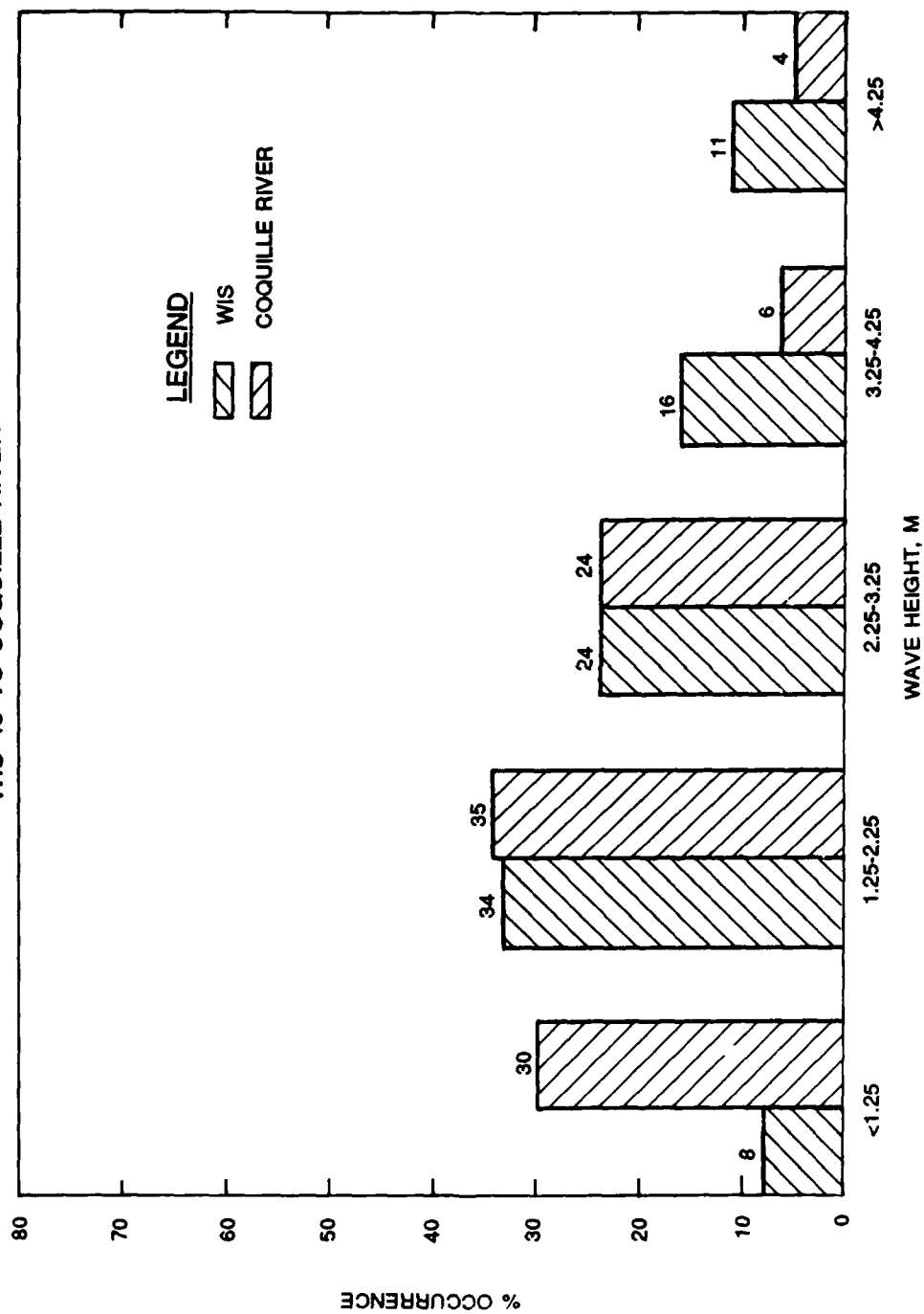


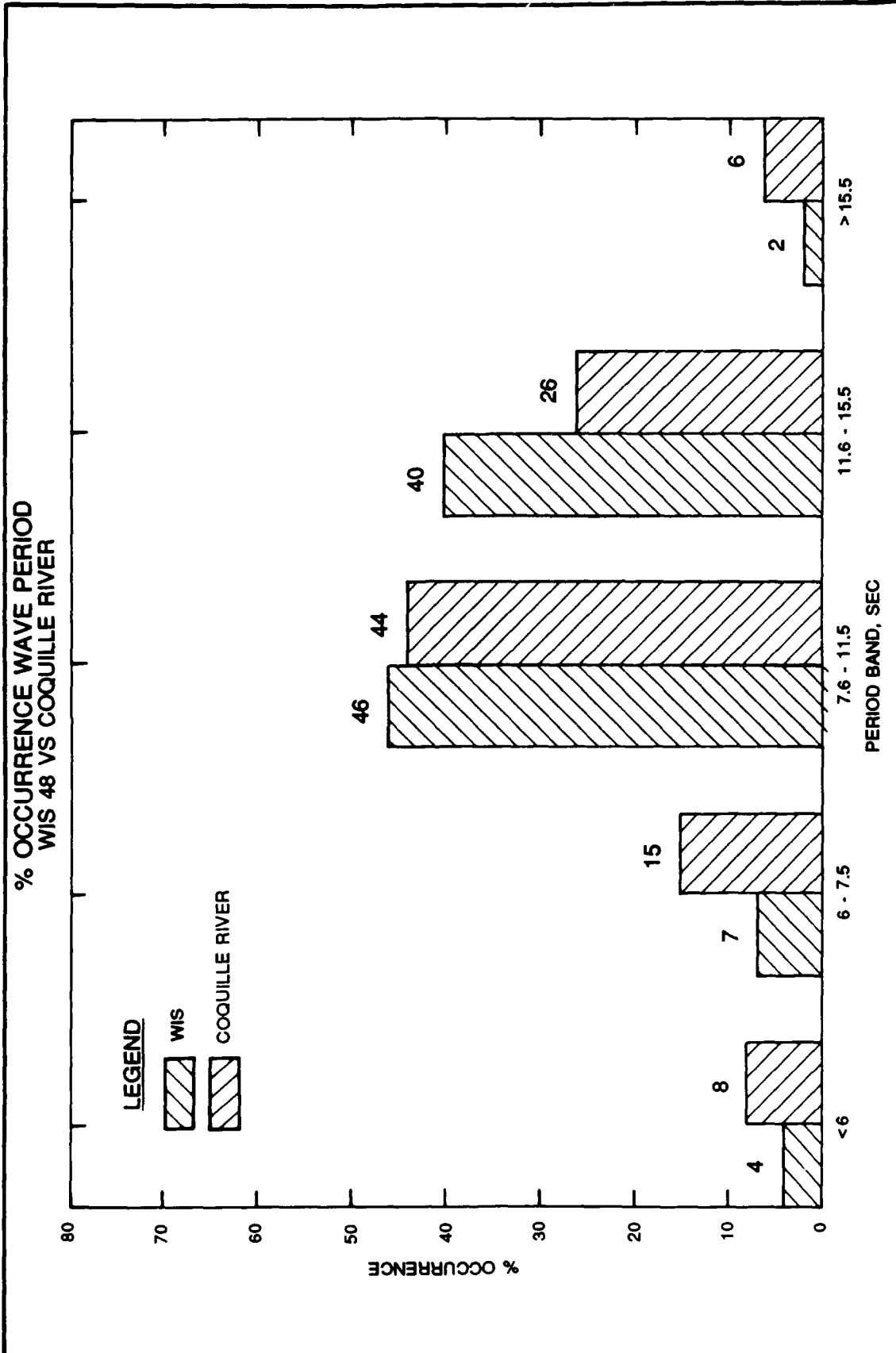
% OCCURRENCE WAVE PERIOD WIS 22 VS BUOY 46010



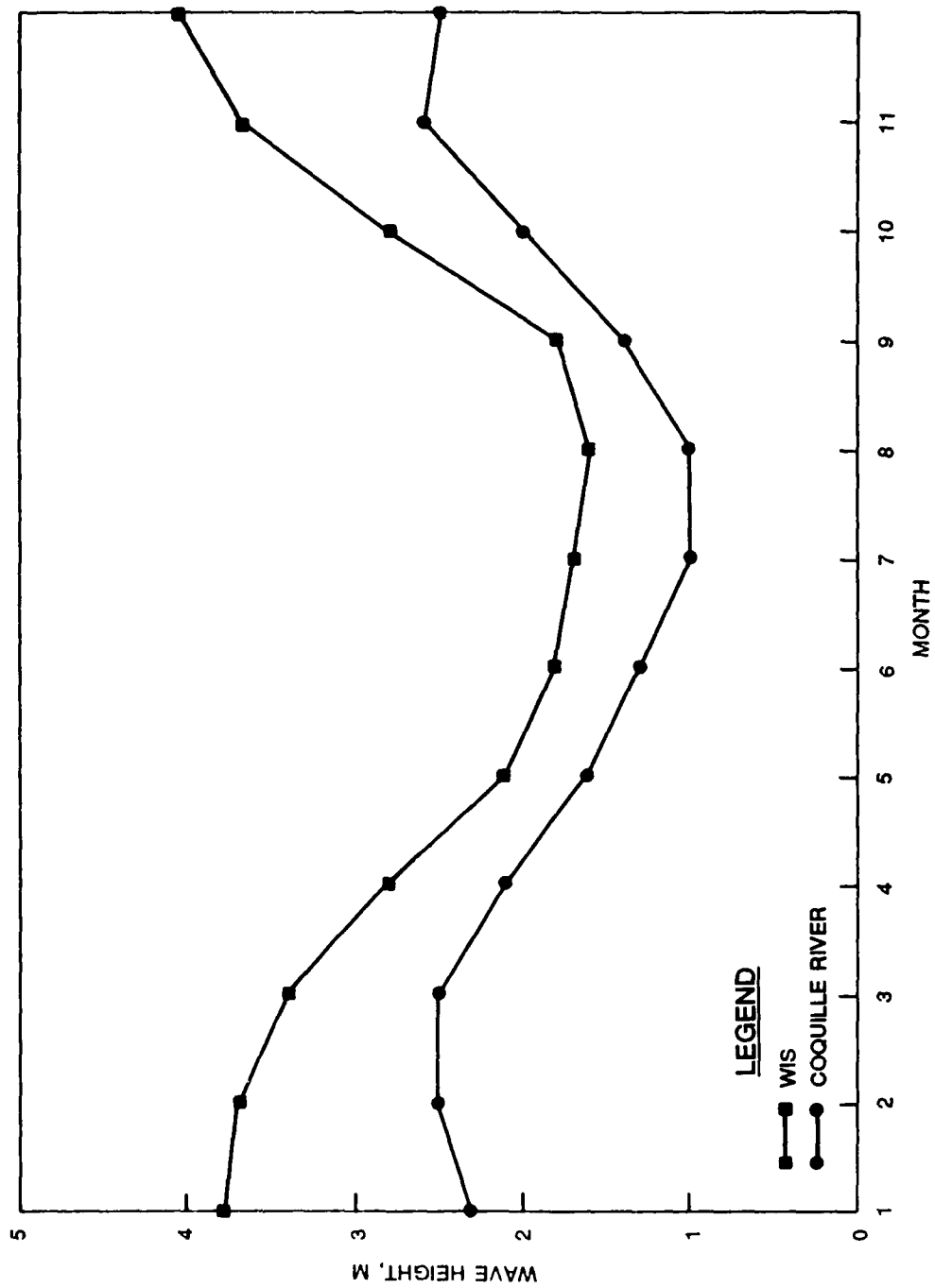


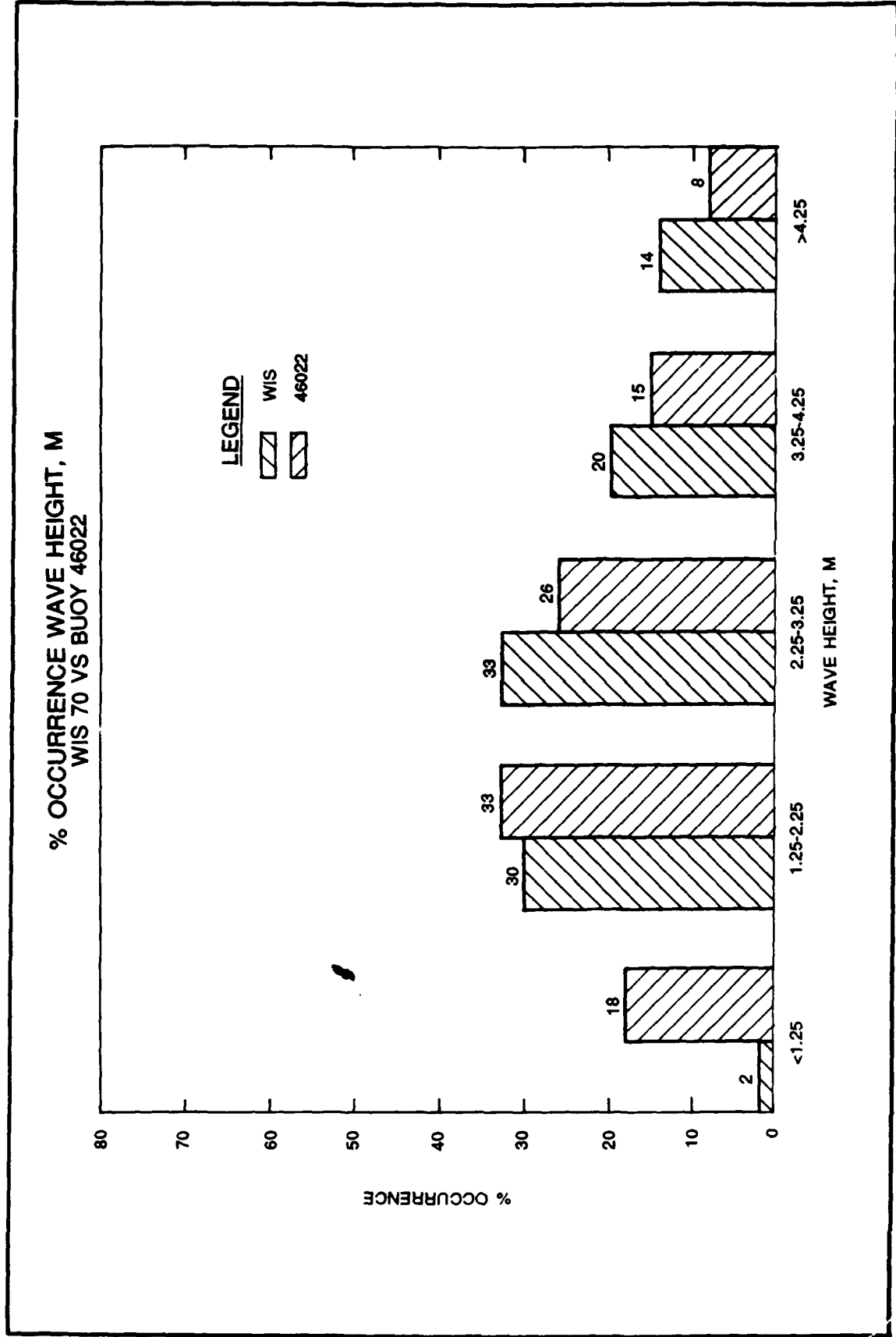
% OCCURRENCE WAVE HEIGHT, M WIS 48 VS COQUILLE RIVER



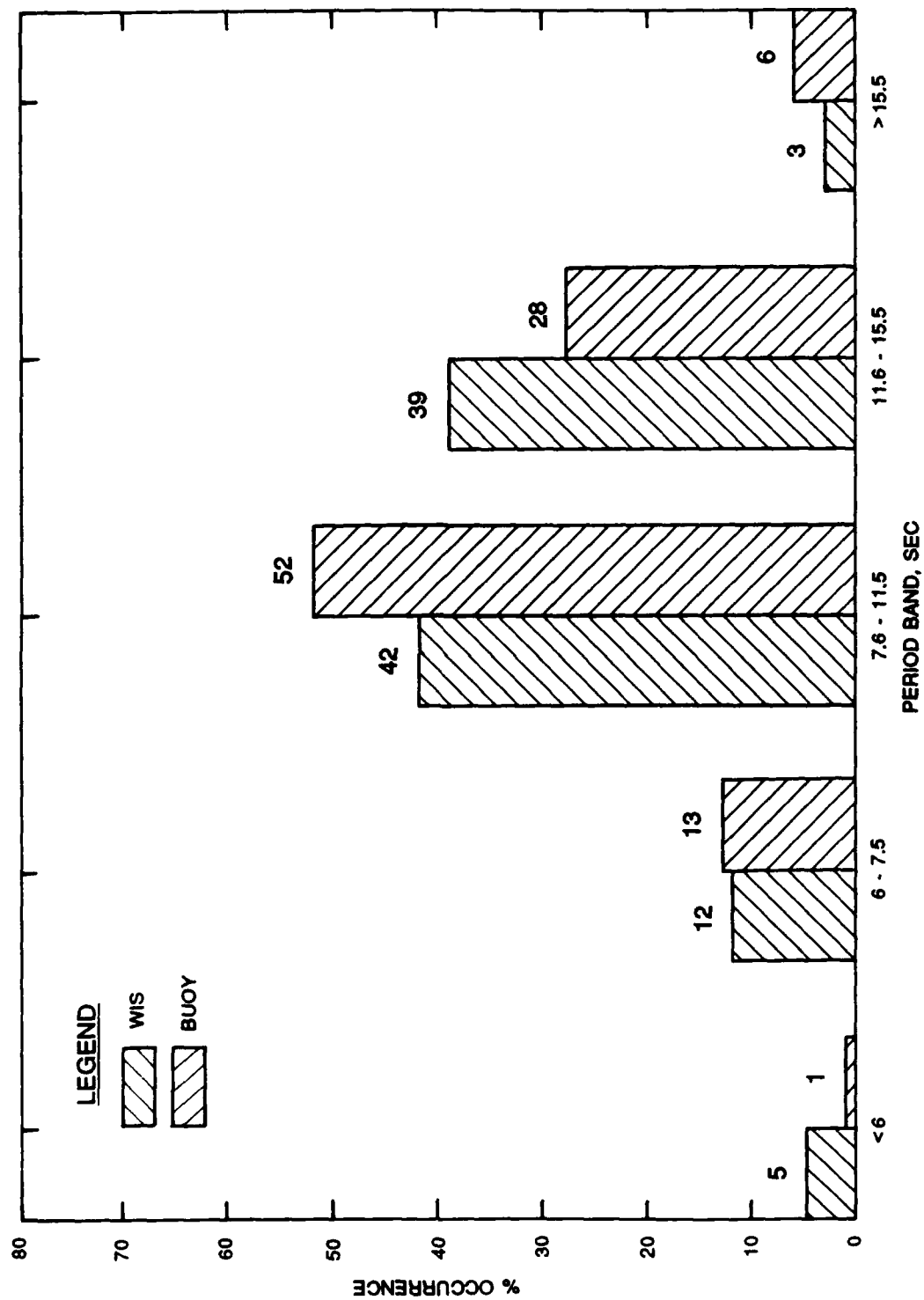


WIS 48 VS COQUILLE RIVER MONTHLY MEANS





% OCCURRENCE WAVE PERIOD WIS 70 VS BUOY 46022



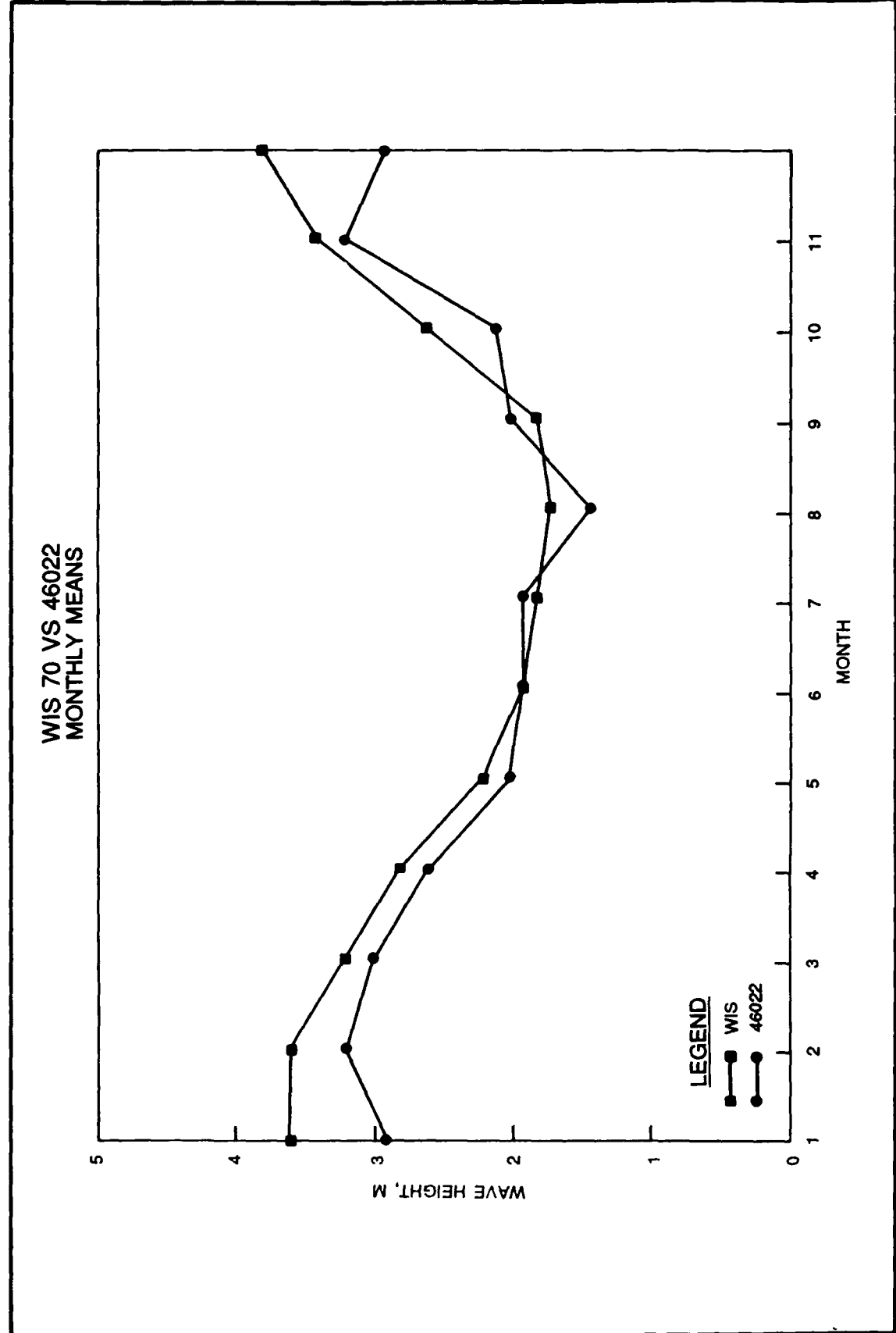
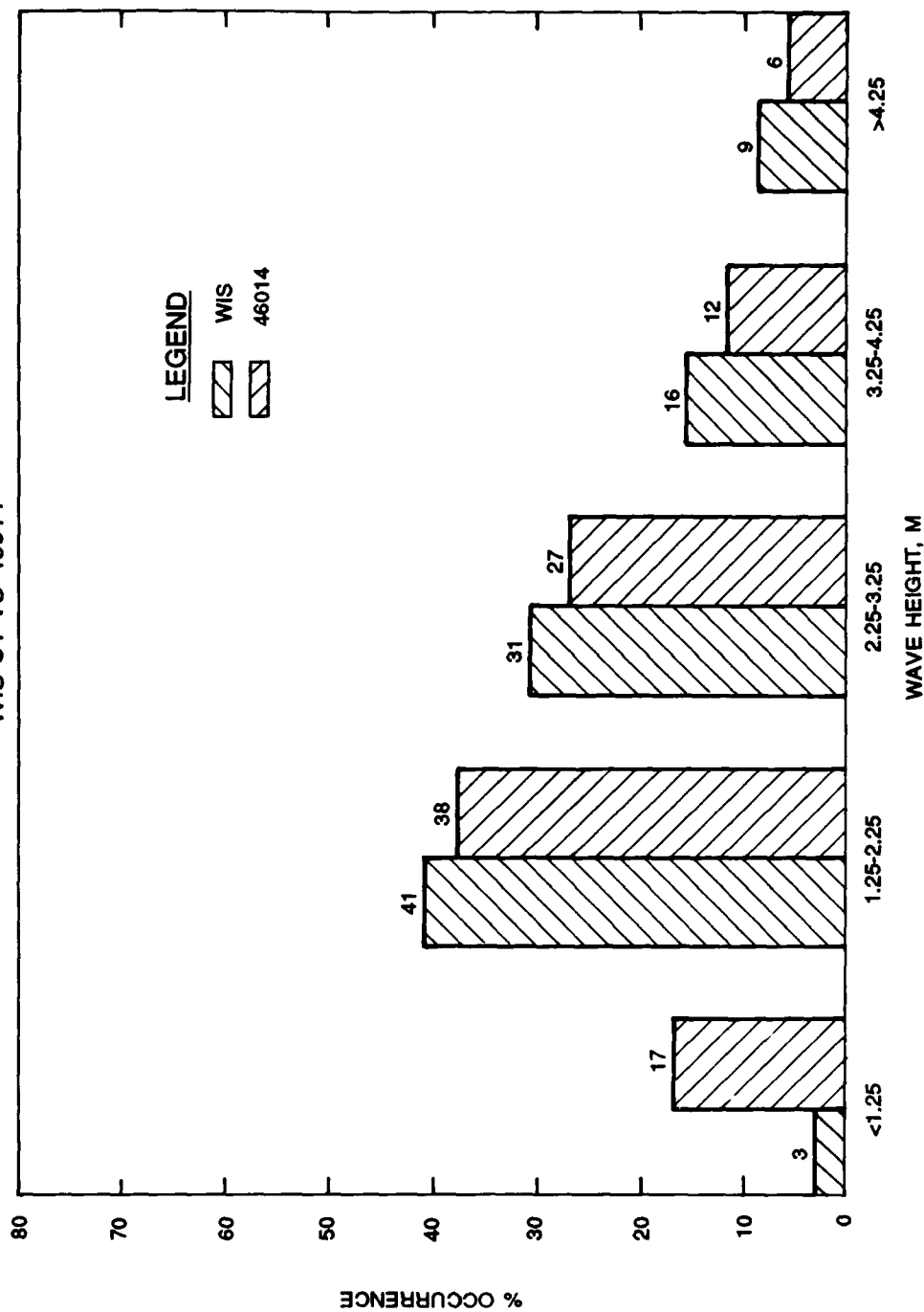
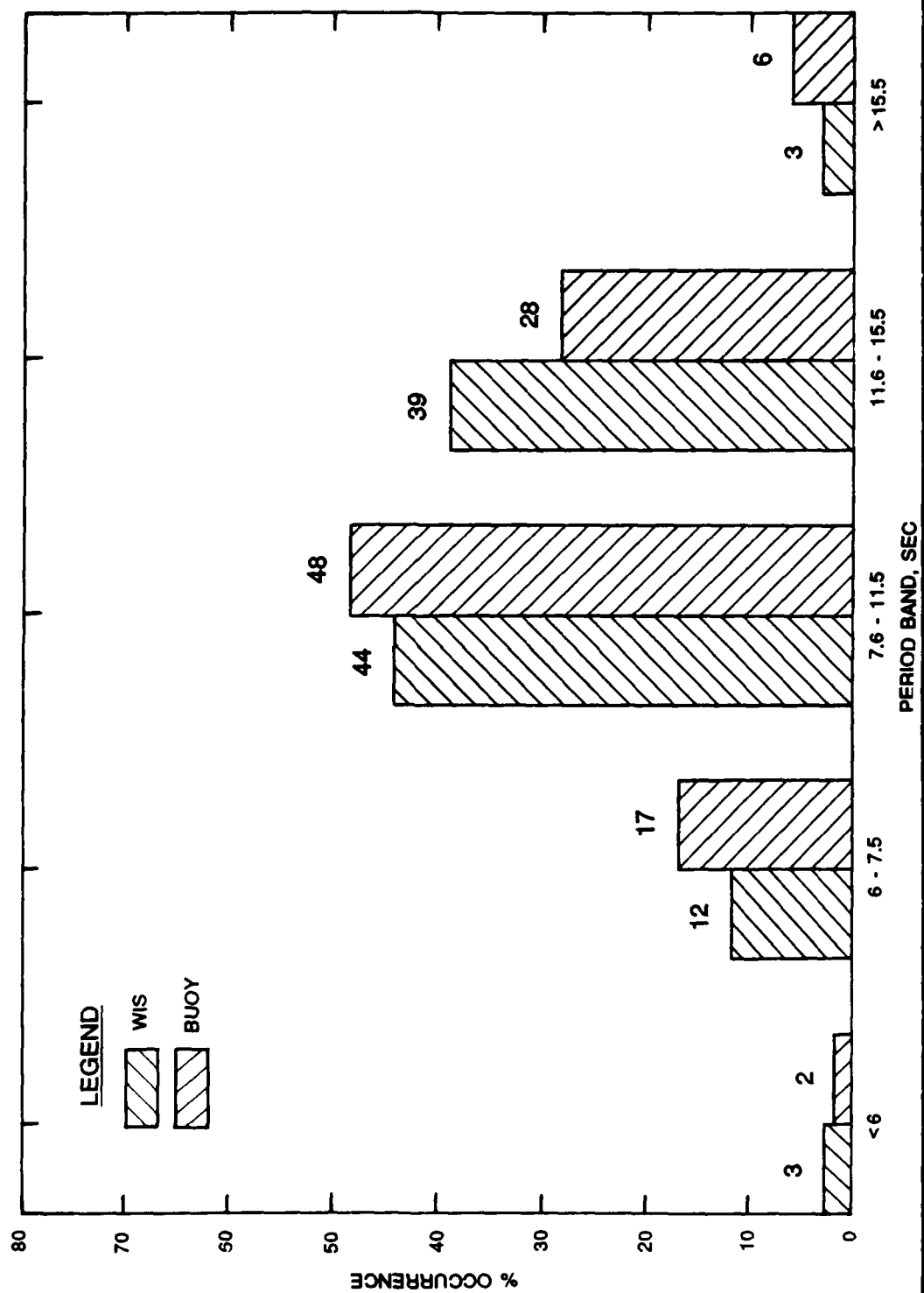


PLATE 12

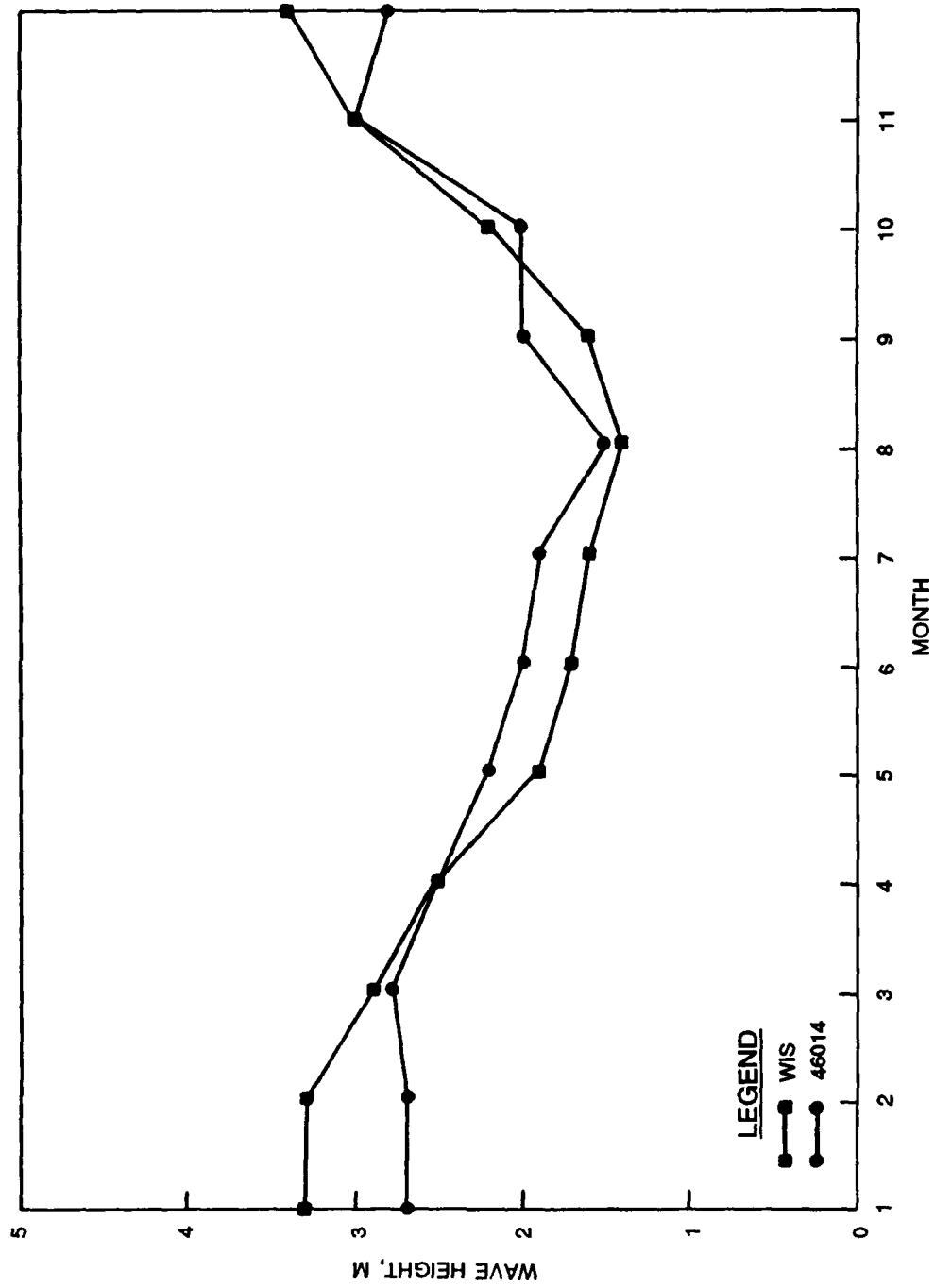
% OCCURRENCE WAVE HEIGHT, M
WIS 84 VS 46014



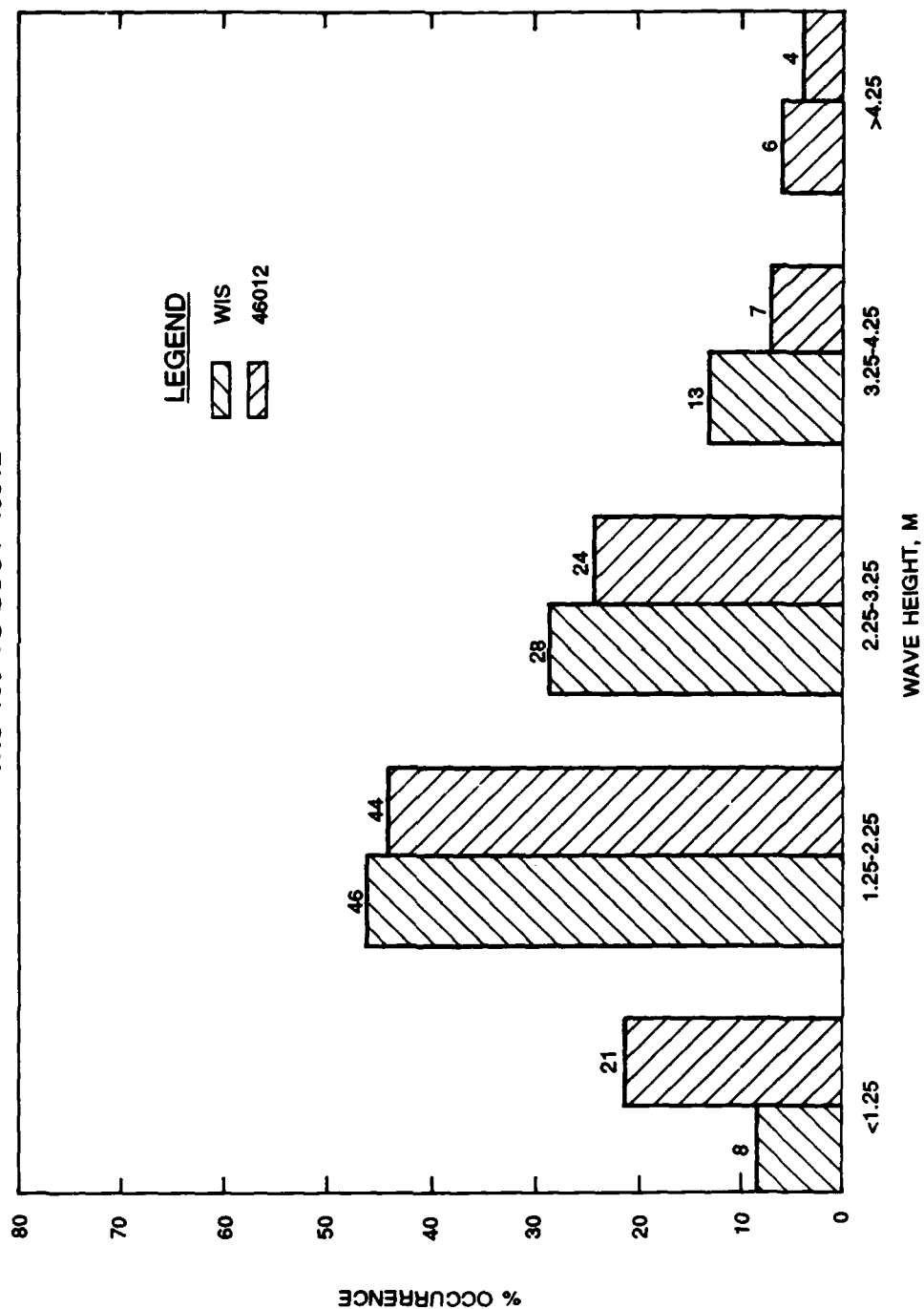
% OCCURRENCE WAVE PERIOD WIS 84 VS BUOY 46014

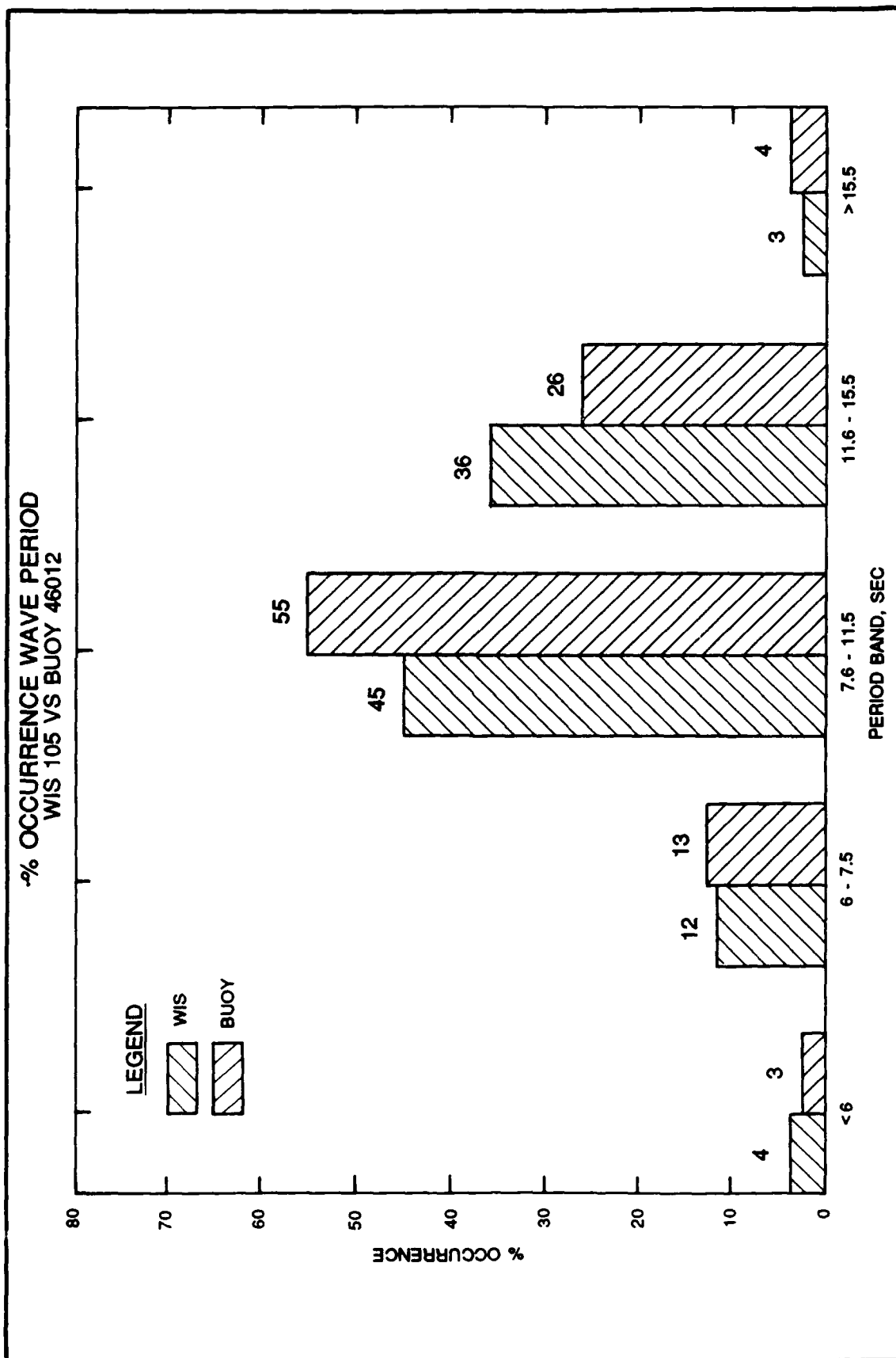


WIS 84 VS 46014
MONTHLY MEANS

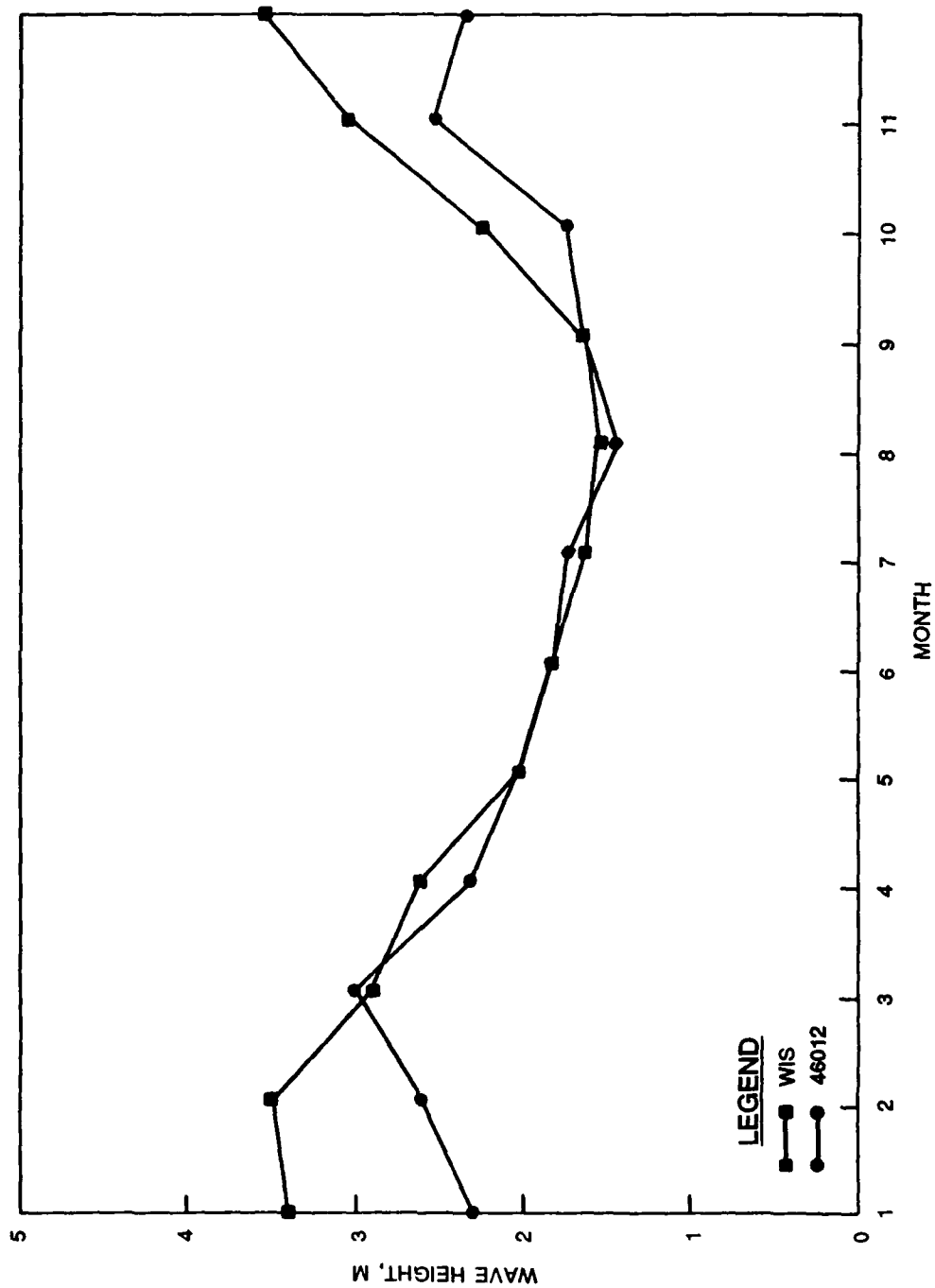


% OCCURRENCE WAVE HEIGHT WIS 105 VS BUOY 46012

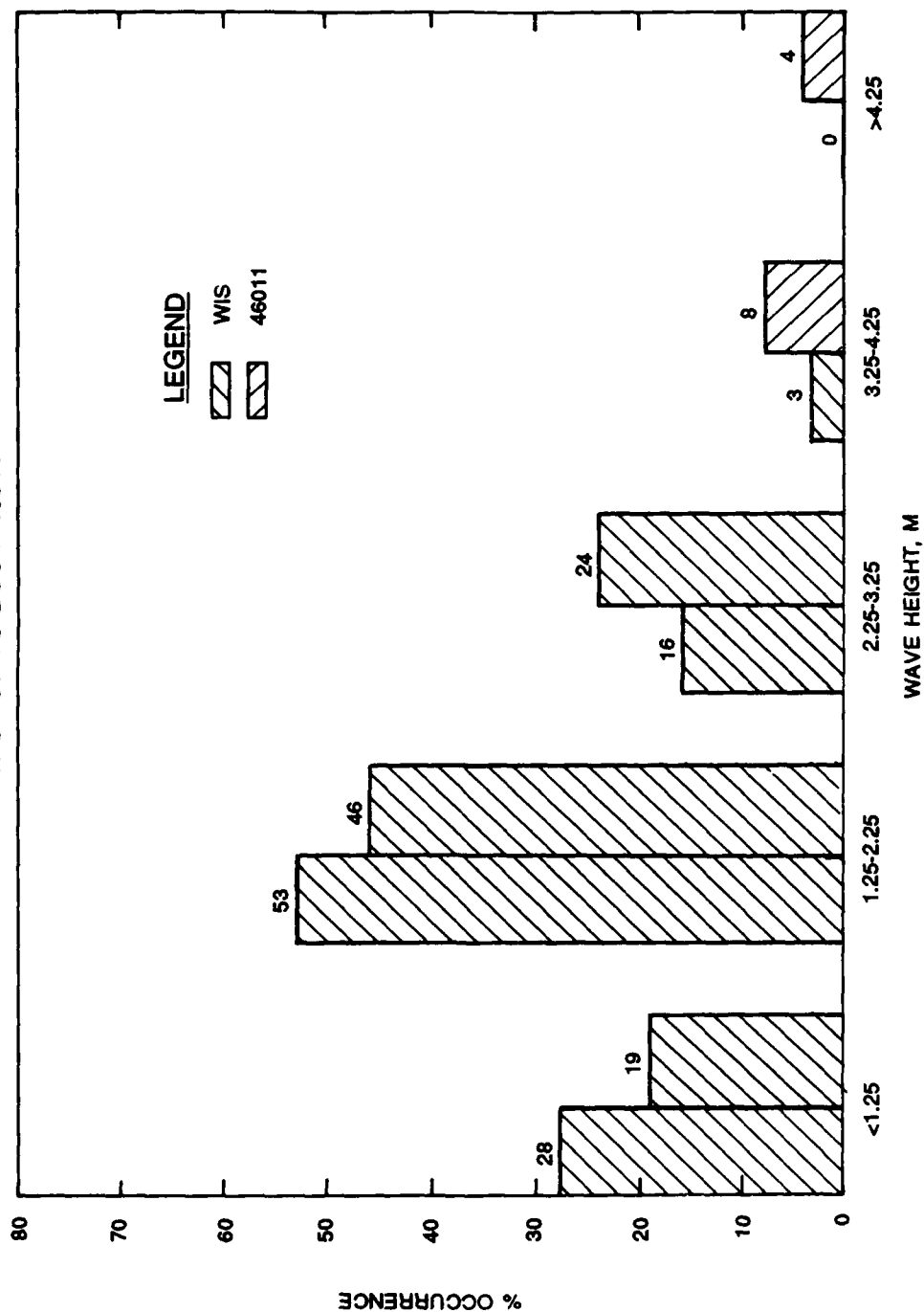




WIS 106 VS 46012
MONTHLY MEANS



% OCCURRENCE WAVE HEIGHT WIS 130 VS BUOY 46011



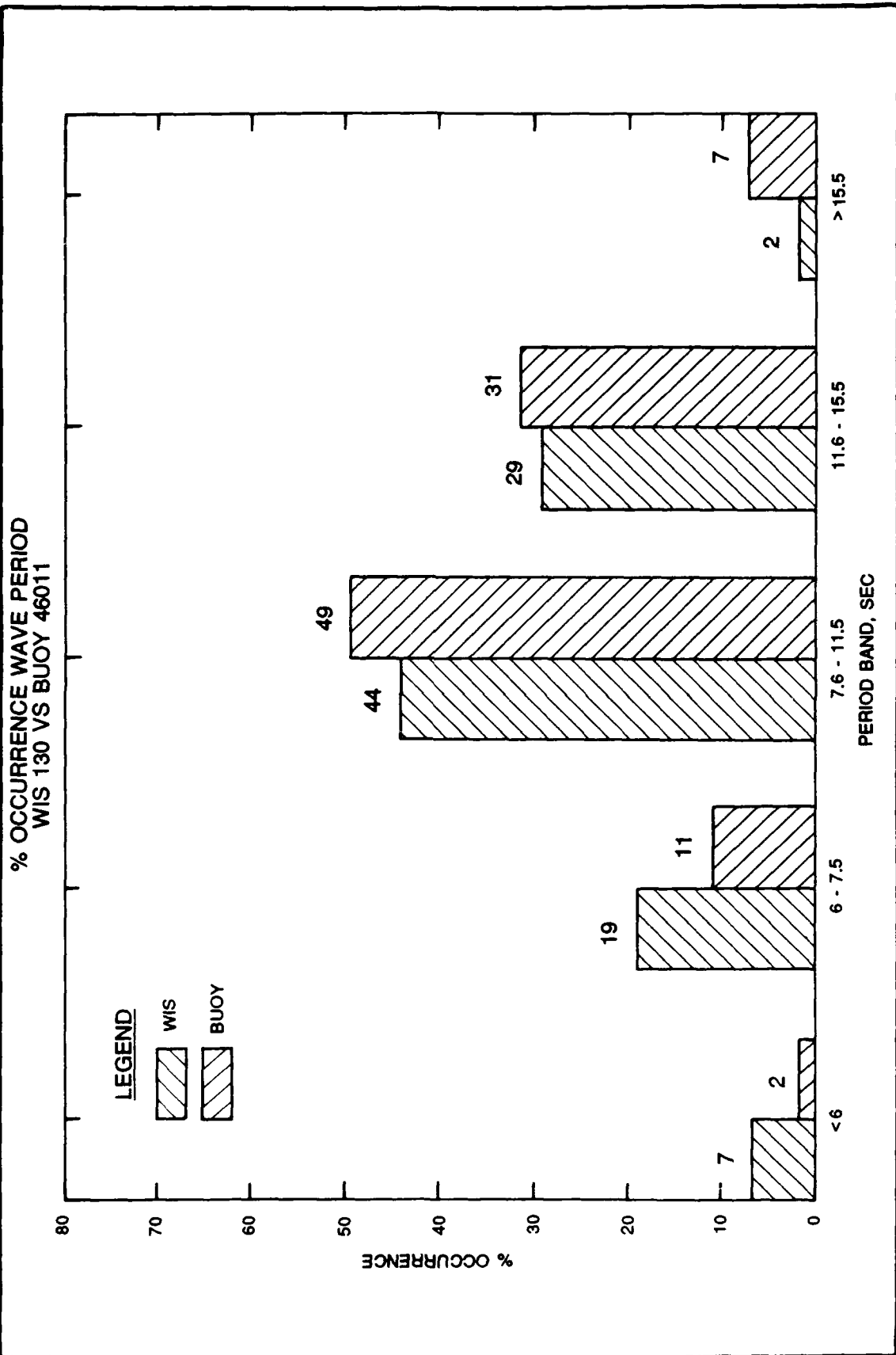
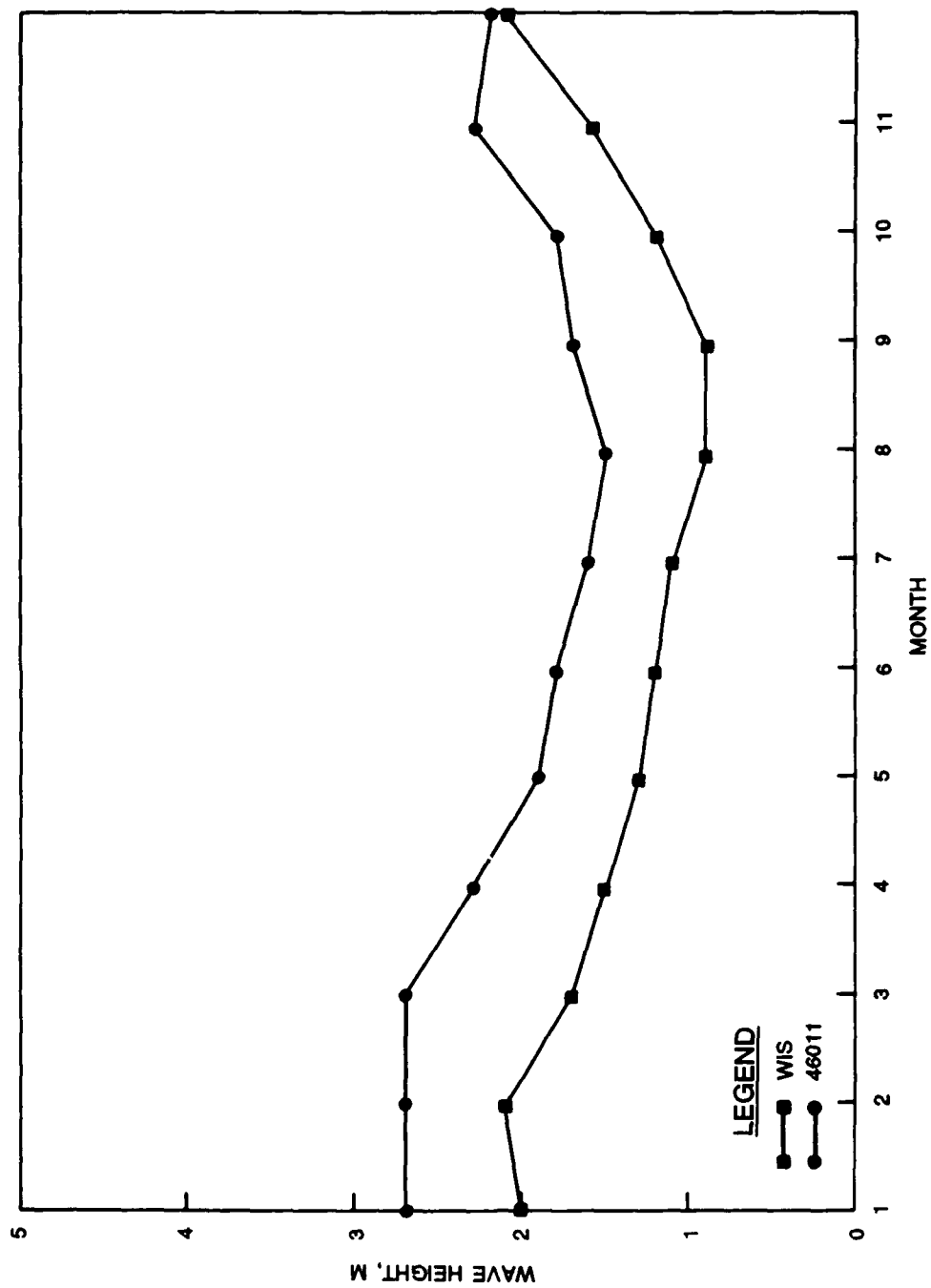
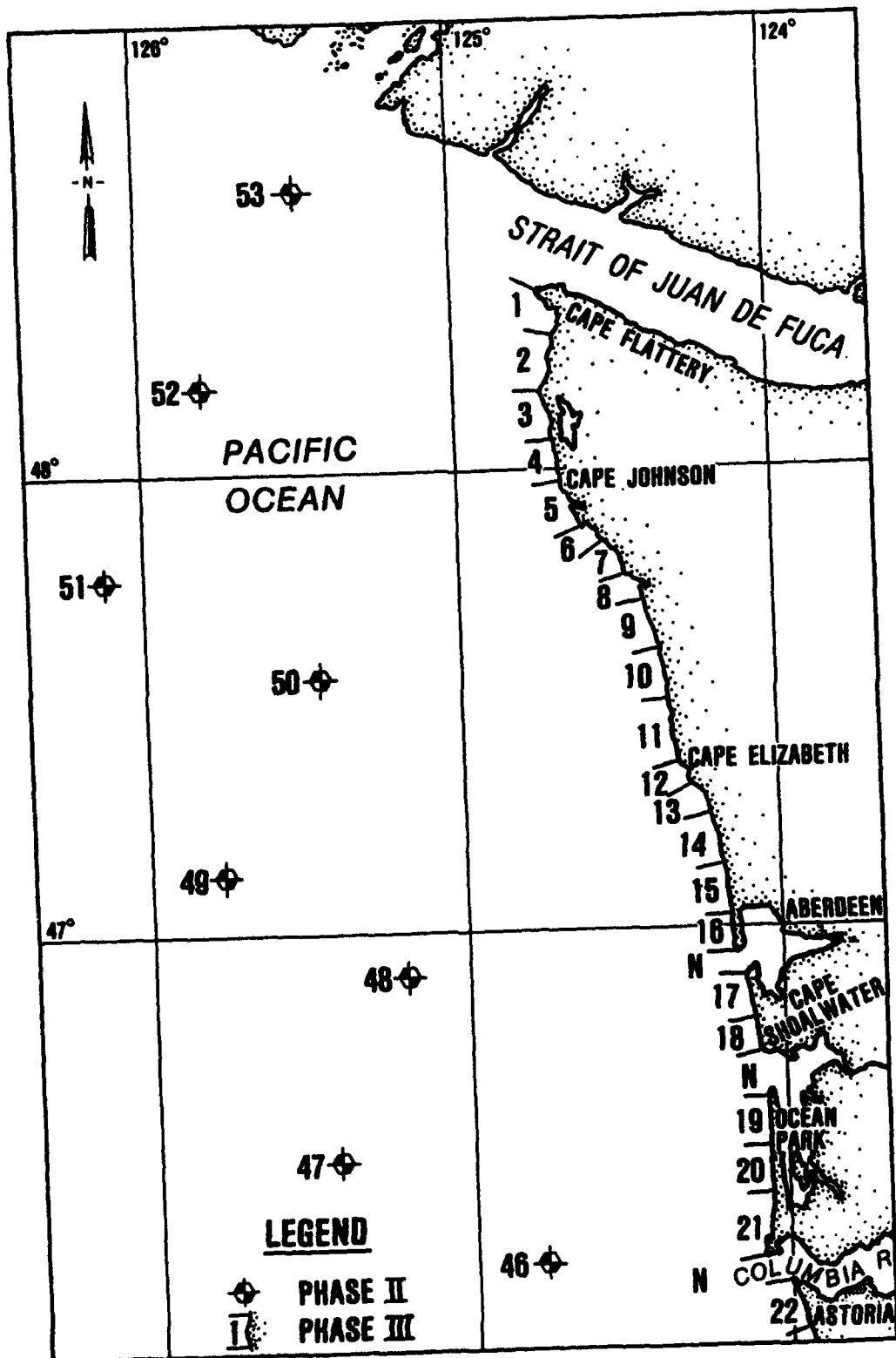


PLATE 20

WIS 130 VS 46011
MONTHLY MEANS



Appendix A: Sta 1 through 21



PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	17	.	.	.	.	.	.	.	.	.	17
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	17	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.89 LARGEST HS(M) = 0.98 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 10

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	59	11	15	.	.	.	.	.	.	.	93
0.50-0.99	552	2149	1110	5	.	.	.	.	.	.	3816
1.00-1.49	1074	2421	1629	183	11	1	.	.	.	.	7324
1.50-1.99	650	1009	1769	614	133	.	.	.	.	.	4115
2.00-2.49	42	595	1487	602	258	22	.	.	.	.	2005
2.50-2.99	.	100	172	263	453	83	.	.	.	.	1071
3.00-3.49	.	42	47	90	354	131	1	.	.	.	645
3.50-3.99	.	.	8	20	140	237	5	.	.	.	410
4.00-4.49	.	.	3	6	37	159	15	.	.	.	220
4.50-4.99	.	.	.	.	1	65	15	.	.	.	81
5.00+	.	.	.	.	1	42	39	.	.	.	82
TOTAL	2377	6327	7240	1788	1328	748	75	0	0	0	11636

MEAN HS(M) = 1.62 LARGEST HS(M) = 5.99 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 11636

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	49
0.50-0.99	53	1310	1451	515	88	13	8	.	.	.	3460
1.00-1.49	90	1892	5092	2992	1050	305	20	18	17	.	11461
1.50-1.99	135	639	3585	4504	3196	1242	183	32	1	.	13697
2.00-2.49	56	616	1115	3073	4142	2193	396	25	.	.	11616
2.50-2.99	.	289	515	939	3560	3665	865	37	.	.	9760
3.00-3.49	.	56	347	485	2089	3757	1398	46	.	.	8178
3.50-3.99	.	6	183	236	1030	3263	1887	77	.	.	6582
4.00-4.49	.	.	77	112	554	7012	2008	159	.	.	4922
4.50-4.99	.	.	10	47	160	869	1552	157	.	.	2745
5.00+	.	.	.	11	53	499	2147	701	.	.	2411
TOTAL	334	4818	12483	12974	16022	17627	10464	1242	42	0	44457

MEAN HS(M) = 2.62 LARGEST HS(M) = 7.52 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 44457

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	3	29		1	3						32
1.00 - 1.49	18	183	70								275
1.50 - 1.99	92	258	239	73	47	10					719
2.00 - 2.49	34	278	278	140	97	10					837
2.50 - 2.99	3	155	210	181	167	58	1				775
3.00 - 3.49		44	140	143	212	51	3				593
3.50 - 3.99		8	41	44	160	75	17				345
4.00 - 4.49			6	13	90	46	6				161
4.50 - 4.99				5	61	39	5				110
5.00 +				1	20	70	17	0	0	0	108
TOTAL	150	955	984	601	857	359	49	0	0	0	

MEAN HS(M) = 2.70 LARGEST HS(M) = 6.27 MEAN TP(SEC) = 9.4 NUMBER OF CASES = 2325

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											11
0.50 - 0.99	5	5									13
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	11	13	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.54 LARGEST HS(M) = 0.96 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 15

PHASE 3 ST. 1 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 190.0
 LAT. LON. START= 48.37N/124.75W LAT. LON. END= 48.30N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 1 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 48.37N/124.75W LAT. LONG. END = 48.35N/124.70W
 SHORELINE ANGLE = 160.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	118	190	188	138	106	125	182	13	2	1	13
0.50-0.99	163	349	256	319	331	305	399	13	1	1	730
1.00-1.49	187	190	188	138	106	125	182	13	2	1	1803
1.50-1.99	13	149	188	138	106	125	182	13	2	1	1443
2.00-2.49	..	14	256	319	331	305	399	13	1	1	1157
2.50-2.99	..	1	1	1	1	1	1	1	1	1	842
3.00-3.49	..	..	1	1	1	1	1	1	1	1	741
3.50-3.99	..	..	1	1	1	1	1	1	1	1	528
4.00-4.49	..	..	1	1	1	1	1	1	1	1	297
4.50-4.99	..	..	1	1	1	1	1	1	1	1	359
TOTAL	287	1208	2068	1537	1817	1869	1055	119	3	0	58440

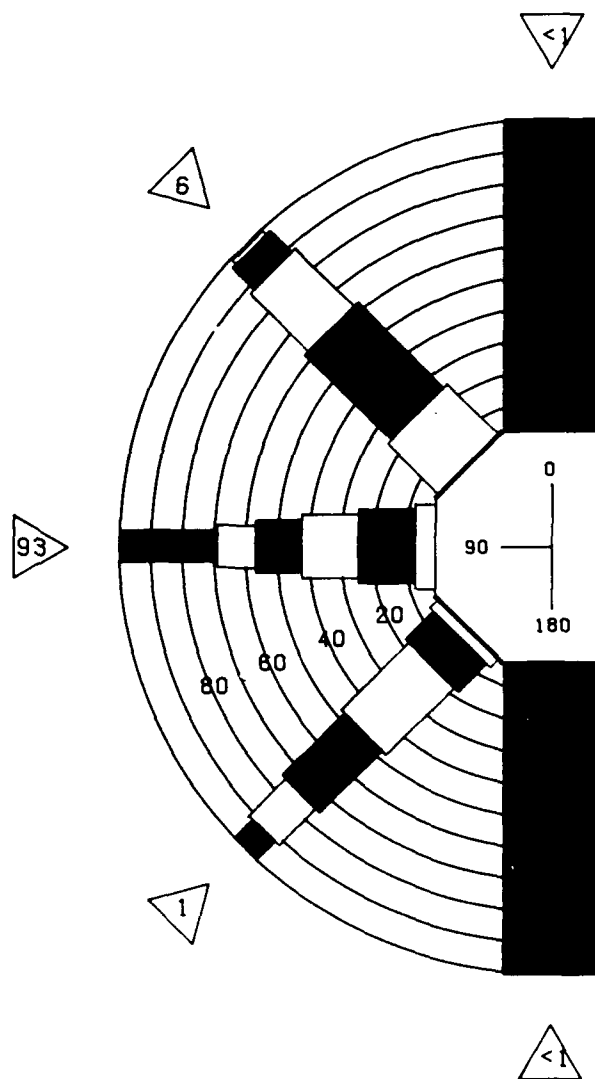
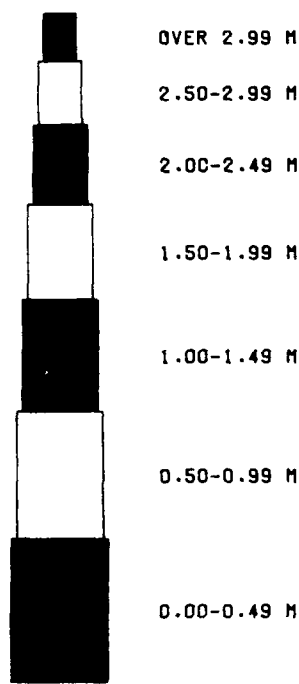
MEAN HS(M) = 2.42 LARGEST HS(M) = 7.52 MEAN TP(SEC) = 10.5 TOTAL CASES = 58440

STATION 1

20 YEARS

SHORELINE ANGLE = 160°

WATER DEPTH = 10 M



WIS STATION 1 (48.37N/ 124.75W TO 48.30N/ 124.70W)

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

[illegible]

WIS STATION 1 (48.37N/ 124.75W TO 48.30N/ 124.70W)

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

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20 YR. STATISTICS FOR PACIFIC STATION 1 (48.37N/ 124.75W TO 48.30N/ 124.70
MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 12.6
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 10.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . . . 090
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 2.5
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.0
LARGEST WAVE HS . . . . . (METERS) 16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . . . (DEGREES) 16.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) 72122600

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PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	32	1	.	.	.	.	.	.	.	.	33
1.00-1.49	309	1	.	.	.	.	.	.	.	.	310
1.50-1.99	364	355	1	.	.	.	.	.	.	.	720
2.00-2.49	27	355	.	.	.	.	.	.	.	.	382
2.50-2.99	.	1	.	.	.	.	.	.	.	.	1
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	732	66	1	0	0	0	0	0	0	0	800

MEAN HS(M) = 1.56 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 471

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	44	15	.	.	.	.	.	.	.	.	59
0.50-0.99	506	2277	1877	446	68	17	8	.	.	.	5219
1.00-1.49	886	3439	7185	2760	994	258	23	.	.	.	15551
1.50-1.99	824	12422	4734	4592	2907	1208	165	5	.	.	16214
2.00-2.49	176	9655	12555	3340	3821	3130	417	25	.	.	16229
2.50-2.99	3	2222	378	942	33518	3331	903	39	.	.	6226
3.00-3.49	.	75	167	412	2049	3559	1466	58	.	.	7786
3.50-3.99	.	.	63	131	833	3813	1921	131	.	.	5698
4.00-4.49	.	.	5	34	244	1753	1969	140	.	.	4145
4.50-4.99	.	.	.	8	63	737	1451	162	.	.	2426
5.00+	.	.	.	.	20	299	1627	660	.	.	2606
TOTAL	2439	8226	15684	12665	14517	16115	9950	1251	42	0	67291

MEAN HS(M) = 2.41 LARGEST HS(M) = 7.25 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 47291

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	27	11	396	46	135	65	107	11	11	11	11	1169
0.5 - 0.99	65	982	1481	364	135	65	107	11	11	11	11	3092
1.0 - 1.49	159	504	1197	744	634	107	107	11	11	11	11	3347
1.5 - 1.99	39	574	607	768	975	299	11	11	11	11	11	3273
2.0 - 2.49	177	352	379	1040	612	197	11	11	11	11	11	2657
2.5 - 2.99	23	176	191	568	886	154	11	11	11	11	11	1998
3.0 - 3.49	80	85	316	492	196	11	11	11	11	11	11	1180
3.5 - 3.99	30	34	133	231	162	10	11	11	11	11	11	600
4.0 - 4.49	1	11	20	106	102	10	11	11	11	11	11	250
4.5 - 4.99	61	203	5	36	5	0	0	0	0	0	0	276
TOTAL	290	3001	4320	2623	3827	2851	925	36	0	0	0	

MEAN HS(M) = 2.32 LARGEST HS(M) = 6.32 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 10469

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	10	1	1	1	1	1	1	1	1	1	18
0.5 - 0.99	207	633	1	1	1	1	1	1	1	1	1	84
1.0 - 1.49	327	599	3	1	1	1	1	1	1	1	1	39
1.5 - 1.99	3	29	1	1	1	1	1	1	1	1	1	124
2.0 - 2.49	1	1	1	1	1	1	1	1	1	1	1	1
2.5 - 2.99	1	1	1	1	1	1	1	1	1	1	1	1
3.0 - 3.49	1	1	1	1	1	1	1	1	1	1	1	1
3.5 - 3.99	1	1	1	1	1	1	1	1	1	1	1	1
4.0 - 4.49	1	1	1	1	1	1	1	1	1	1	1	1
4.5 - 4.99	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	90	255	4	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.36 LARGEST HS(M) = 3.11 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 208

PHASE 3 ST. 2 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 48.30N/124.70W LAT. LON. END= 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0	0	0	0	0	0	0	0	0	0	0	0
0.5 - 0.99	0	0	0	0	0	0	0	0	0	0	0	0
1.0 - 1.49	0	0	0	0	0	0	0	0	0	0	0	0
1.5 - 1.99	0	0	0	0	0	0	0	0	0	0	0	0
2.0 - 2.49	0	0	0	0	0	0	0	0	0	0	0	0
2.5 - 2.99	0	0	0	0	0	0	0	0	0	0	0	0
3.0 - 3.49	0	0	0	0	0	0	0	0	0	0	0	0
3.5 - 3.99	0	0	0	0	0	0	0	0	0	0	0	0
4.0 - 4.49	0	0	0	0	0	0	0	0	0	0	0	0
4.5 - 4.99	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 2 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 48.30N/124.70W LAT. LONG. END = 48.17N/124.75W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.49	135	307	227	49	11	1	1	1	2	1	11
0.99	135	307	227	49	11	1	1	1	2	1	650
1.49	135	307	227	49	11	1	1	1	2	1	1901
1.99	135	307	227	49	11	1	1	1	2	1	1955
2.49	135	307	227	49	11	1	1	1	2	1	1545
2.99	135	307	227	49	11	1	1	1	2	1	1196
3.49	135	307	227	49	11	1	1	1	2	1	976
3.99	135	307	227	49	11	1	1	1	2	1	704
4.49	135	307	227	49	11	1	1	1	2	1	472
4.99	135	307	227	49	11	1	1	1	2	1	266
5.00 +	135	307	227	49	11	1	1	1	2	1	207
TOTAL	353	1153	1998	1525	1828	1893	1084	125	4	0	

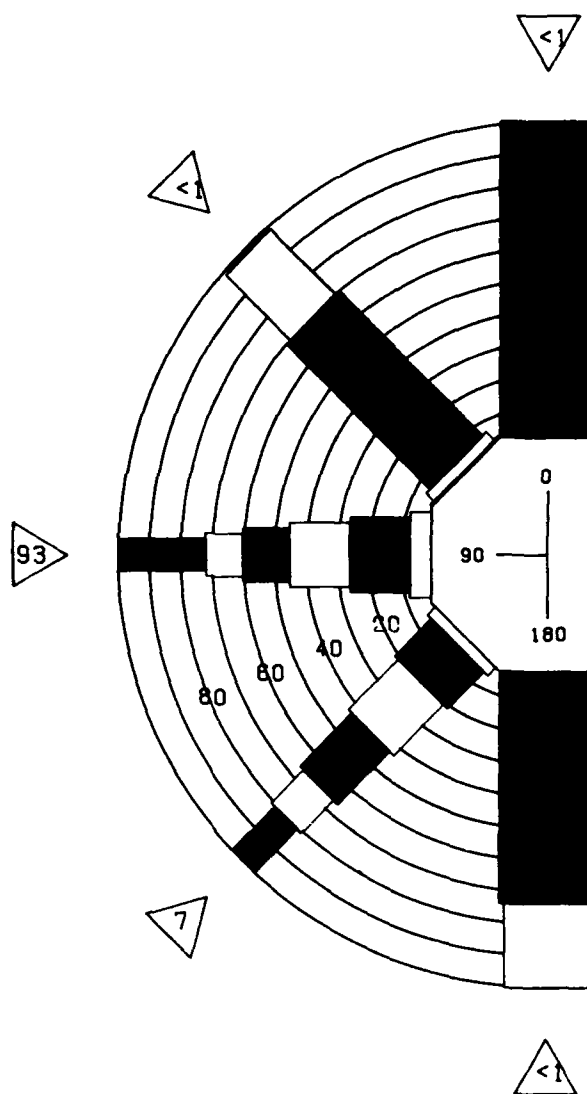
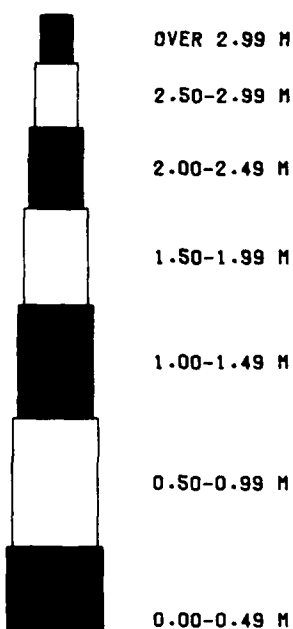
MEAN HS(M) = 2.38 LARGEST HS(M) = 7.25 MEAN TP(SEC) = 10.5 TOTAL CASES = 58440

STATION 2

20 YEARS

SHORELINE ANGLE = 192°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 2 (48.30N/ 124.70W TO 48.17N/ 124.75W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1955	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1956	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1957	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1958	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1959	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1960	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1961	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1962	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1963	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1964	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1965	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1966	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1967	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1968	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1969	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1970	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1971	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1972	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1973	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1974	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1975	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 2 (48.30N/ 124.70W TO 48.17N/ 124.75W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1955	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1956	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1957	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1958	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1959	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1960	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1961	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1962	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1963	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1964	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1965	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1966	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1967	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1968	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1969	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1970	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1971	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1972	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1973	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1974	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5
1975	3.4	3.3	2.9	2.3	1.7	1.6	1.3	1.3	1.7	2.5	3.1	3.5	2.5

20 YR. STATISTICS FOR PACIFIC STATION 2 (48.30N/ 124.70W TO 48.17N/ 124.75W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEG (CENTER) DIRECTION	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	96.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		62111915

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL	
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
00	0	
01	0	
02	0	
03	0	
04	0	
05	0	
06	0	
07	0	
08	0	
09	0	
10	0	
11	0	
12	0	
13	0	
14	0	
15	0	
16	0	
17	0	
18	0	
19	0	
20	0	
21	0	
22	0	
23	0	
24	0	
25	0	
26	0	
27	0	
28	0	
29	0	
30	0	
31	0	
32	0	
33	0	
34	0	
35	0	
36	0	
37	0	
38	0	
39	0	
40	0	
41	0	
42	0	
43	0	
44	0	
45	0	
46	0	
47	0	
48	0	
49	0	
50	0	
51	0	
52	0	
53	0	
54	0	
55	0	
56	0	
57	0	
58	0	
59	0	
60	0	
61	0	
62	0	
63	0	
64	0	
65	0	
66	.	.	.									

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)						TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	385	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 1.41	LARGEST HS(M) = 2.10				MEAN TP(SEC) = 5.1				NUMBER OF CASES = 226		

HEIGHT(METERS)				PERIOD(SECONDS)								TOTAL		
				4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.4	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	0	0	47	101	224	233	206	1	.	.	.	.	54
0.5	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
1.0	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
1.5	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
2.0	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
2.5	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
3.0	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
3.5	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
4.0	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
4.5	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
5.0	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
5.5	501	1806	1204	501	891	881	333	233	1	.	.	.	.	1819
TOTAL	2653	4703	2898	835	623	384	22	0	0	0				7997
MEAN HS(M) = 1.68				LARGEST HS(M) = 5.58				MEAN TP(SEC) = 7.7				NUMBER OF CASES = 7997		

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0	0	0	0	0	0	0	0	0	0	47
0.5	-	0	0	0	0	0	0	0	0	0	0	39
1.0	-	0	0	0	0	0	0	0	0	0	0	27
1.5	-	0	0	0	0	0	0	0	0	0	0	20
2.0	-	0	0	0	0	0	0	0	0	0	0	14
2.5	-	0	0	0	0	0	0	0	0	0	0	10
3.0	-	0	0	0	0	0	0	0	0	0	0	8
3.5	-	0	0	0	0	0	0	0	0	0	0	6
4.0	-	0	0	0	0	0	0	0	0	0	0	4
4.5	-	0	0	0	0	0	0	0	0	0	0	3
5.0	-	0	0	0	0	0	0	0	0	0	0	2
5.5	-	0	0	0	0	0	0	0	0	0	0	1
6.0	+	0	0	0	0	0	0	0	0	0	0	0
TOTAL		368	6068	16016	13598	16312	17673	10462	1240	42	0	47813
MEAN HS(M) = 2.55		LARGEST HS(M) = 7.54		MEAN TP(SEC) = 11.0		NUMBER OF CASES = 47813						

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	27	.	.	.	.	.	.	.	.	27
1.00 - 1.49	18	156	94	6	.	.	.	.	.	.	313
1.50 - 1.99	104	282	302	100	71	10	.	.	.	.	869
2.00 - 2.49	59	349	350	179	236	20	.	.	.	.	1083
2.50 - 2.99	3	219	280	219	236	87	3	.	.	.	1047
3.00 - 3.49	.	51	217	177	308	80	6	.	.	.	839
3.50 - 3.99	.	11	80	71	203	174	20	.	.	.	559
4.00 - 4.49	.	1	34	29	162	126	20	.	.	.	472
4.50 - 4.99	.	.	1	18	83	111	23	3	.	.	239
5.00 +	.	.	.	3	29	80	58	1	.	.	171
TOTAL	184	1135	1358	802	1218	688	130	4	0	0	3241

MEAN HS(M) = 2.85 LARGEST HS(M) = 6.52 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 3241

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	3	.	.	.	.	.	.	.	.	11
1.00 - 1.49	17	11	.	.	.	.	.	.	.	.	28
1.50 - 1.99	23	8	.	.	.	.	.	.	.	.	31
2.00 - 2.49	6	22	.	.	.	.	.	.	.	.	28
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	55	45	0	0	0	0	0	0	0	0	62

MEAN HS(M) = 1.64 LARGEST HS(M) = 2.71 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 62

PHASE 3 ST. 3 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 48.17N/124.75W LAT. LON. END= 48.06N/124.70W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

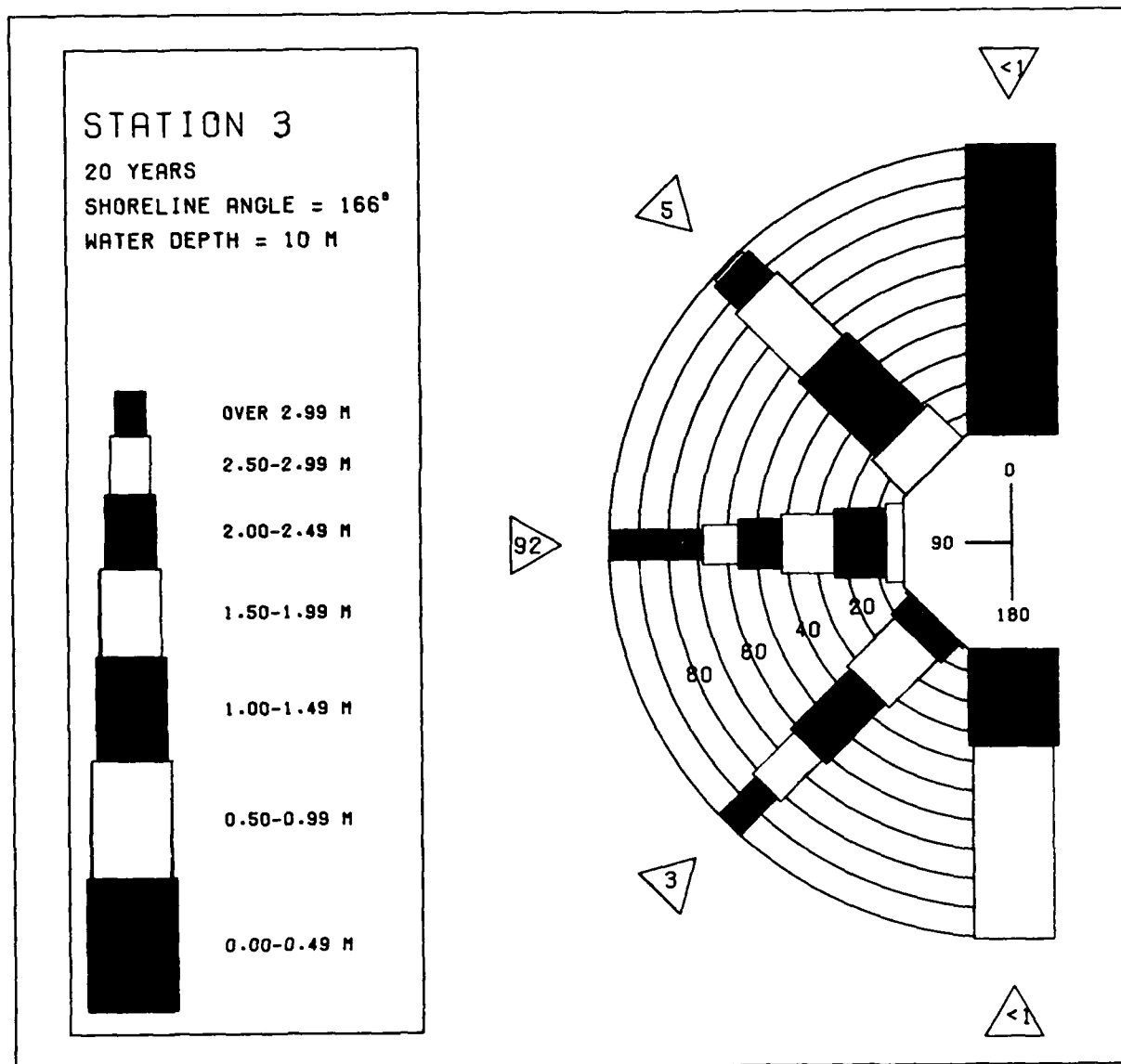
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 3 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 48.17N/124.75W LAT. LONG. END = 48.06N/124.70W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.4	13.4-15.4	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.00-0.49	640	819	915	105	11.7	11.3	15.3	18.1	22.2	LONGER	8
0.50-0.99	1300	3000	2222	45	96	11	1	1	1	1	1833
1.00-1.49	1420	2450	2000	2900	3120	1210	1270	1	1	1	1833
1.50-1.99	26	171	2000	2403	439	210	1270	1	1	1	1833
2.00-2.49	1	161	2000	2403	441	210	1270	1	1	1	1833
2.50-2.99	1	1	2000	2403	278	401	1270	1	1	1	1833
3.00-3.49	1	1	2000	2403	141	278	401	1270	1	1	1833
3.50-3.99	1	1	2000	2403	70	278	401	1270	1	1	1833
4.00-4.49	1	1	2000	2403	22	278	401	1270	1	1	1833
4.50-4.99	1	1	2000	2403	105	278	401	1270	1	1	1833
5.00+	1	1	2000	2403	65	278	401	1270	1	1	1833
TOTAL	362	1193	2024	1520	1813	1869	1055	119	3	0	58440

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.54 MEAN TP(SEC) = 10.5 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 3 (48.17N/ 124.75W TO 48.06N/ 124.70W)

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 12.5
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 90.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . . . (DEGREES) 90
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 2.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 3.5
LARGEST WAVE HS . . . . . (METERS) 16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 88.9
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . . . (DEGREES) 72
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) 72122600

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PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	217	5	.	.	.	.	.	.	.	.	222
1.50 - 1.99	92	47	.	.	.	.	.	.	.	.	139
2.00 - 2.49	.	10	.	.	.	.	.	.	.	.	10
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	310	62	0	0	0	0	0	0	0	0	372

MEAN HS(M) = 1.48 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 219

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	331	898	862	118	47	11	1	.	.	.	2268
1.00 - 1.49	718	1887	1931	568	277	53	.	.	.	.	5434
1.50 - 1.99	992	1201	1394	703	655	278	3	.	.	.	5226
2.00 - 2.49	75	174	270	485	648	528	13	.	.	.	2773
2.50 - 2.99	.	176	167	212	473	402	27	.	.	.	1457
3.00 - 3.49	.	37	80	65	408	201	3	.	.	.	764
3.50 - 3.99	.	.	22	17	128	193	.	.	.	.	360
4.00 - 4.49	.	.	1	6	25	142	3	.	.	.	174
4.50 - 4.99	.	.	.	1	5	35	.	.	.	.	44
5.00 +	.	.	.	.	.	20	1	.	.	.	21
TOTAL	2119	4953	4727	2175	2666	1863	51	0	0	0	10859

MEAN HS(M) = 1.77 LARGEST HS(M) = 5.76 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 10859

PHASE 3 ST. 4 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 48.06N/124.70W LAT. LON. END= 47.96N/124.68W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	.	.	.	.	.	.	.	.	.	36
0.50 - 0.99	63	947	1444	422	70	13	25	.	.	.	2987
1.00 - 1.49	71	1599	5030	2517	1134	337	53	18	1	.	10760
1.50 - 1.99	90	795	3112	3675	2619	1054	249	44	3	.	12031
2.00 - 2.49	25	491	1076	2631	3400	2388	633	32	3	.	10679
2.50 - 2.99	.	167	436	987	3400	3574	1293	100	8	.	9965
3.00 - 3.49	.	53	242	513	1976	3935	1760	102	1	.	8582
3.50 - 3.99	.	1	128	213	1153	3408	2430	198	.	.	7544
4.00 - 4.49	.	.	47	119	525	2488	2404	251	3	.	5927
4.50 - 4.99	.	.	5	11	172	1054	1993	249	.	.	3520
5.00 +	.	.	.	.	78	578	2758	1034	.	.	4429
TOTAL	262	4053	11528	11135	14532	19229	13696	2016	19	0	44714

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.63 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 44714

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0.49											0
0.5	0.99											10
1.0	1.49											186
1.5	1.99											448
2.0	2.49											701
2.5	2.99											857
3.0	3.49											671
3.5	3.99											558
4.0	4.49											434
4.5	4.99											272
5.0	5.49											275
+												
TOTAL		108	747	921	604	1146	697	186	13	0	0	2597
MEAN HS(M) = 3.15		LARGEST HS(M) = 7.26		MEAN TP(SEC) = 10.0		NUMBER OF CASES = 2597						

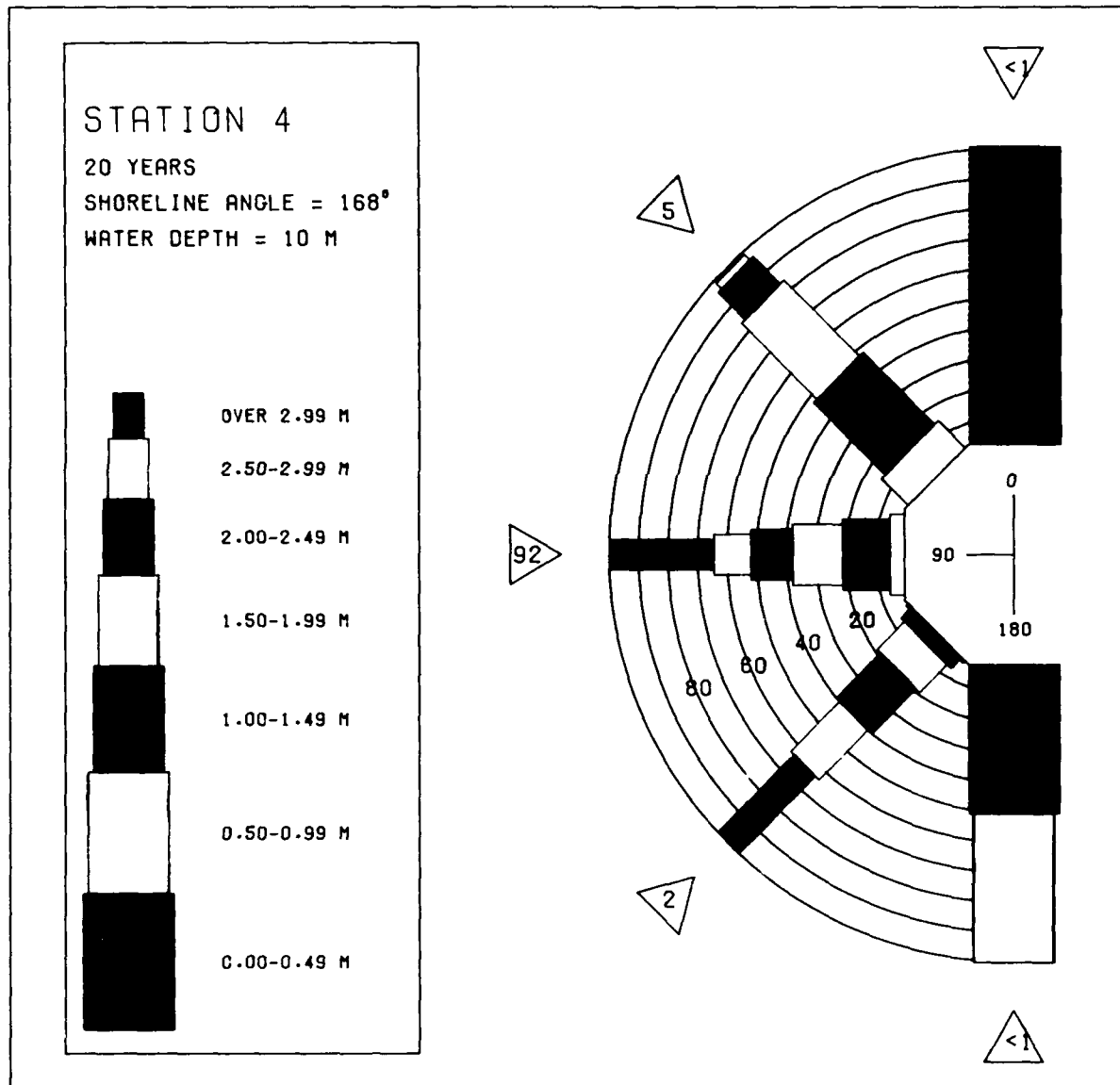
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	1	1	1	1	1	1	1	1	1	1	1
0.5	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1
1.5	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1
2.5	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1
3.5	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1
4.5	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1
5.5	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1
TOTAL	18	58	4	0	0	0	0	0	0	0	51
MEAN HS(M) = 1.53	LARGEST HS(M) = 2.58				MEAN TP(SEC) = 6.6				NUMBER OF CASES =		51

[illegible]

PHASE 3 ST. 4 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START- 48.06N/124.70W LAT. LON. END= 47.96N/124.66W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	186	230	54	11	2	2	1	1	1	2
1.00 - 0.99	40	186	230	54	11	2	2	1	1	1	525
1.50 - 1.49	103	359	704	308	141	39	5	1	1	1	1660
2.00 - 1.99	125	225	462	441	330	173	25	4	1	1	1725
2.50 - 2.49	11	156	154	323	412	293	64	3	1	1	1416
3.00 - 2.99	11	48	82	137	284	405	132	10	1	1	1266
3.50 - 3.49	11	12	51	67	150	422	176	10	1	1	1002
4.00 - 3.99	11	12	23	31	150	374	246	19	1	1	843
4.50 - 4.49	11	12	8	18	72	277	251	25	1	1	651
5.00 - 4.99	11	12	8	7	27	120	202	24	1	1	380
5.00 +	11	12	8	7	27	120	202	24	1	1	470
TOTAL	280	986	1714	1387	1832	2175	1368	101	6	0	58440

MEAN HS(M) = 2.59 LARGEST HS(M) = 7.63 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 4 (48.06N/ 124.70W TO 47.96N/ 124.68W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
1956	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1957	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1958	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1959	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1960	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1961	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1962	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1963	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1964	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1965	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1966	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1967	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
1968	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8
MEAN	3.8	3.6	3.1	2.5	1.8	1.6	1.4	1.3	1.8	2.8	3.5	4.0	2.8

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 4 (48.06N/ 124.70W TO 47.96N/ 124.68W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
1956	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1957	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1958	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1959	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1960	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1961	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1962	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1963	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1964	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1965	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1966	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1967	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
1968	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4
MEAN	6.1	5.4	5.0	4.2	3.4	3.8	3.3	3.3	3.8	4.4	5.4	6.1	5.4

20 YR. STATISTICS FOR PACIFIC STATION 4 (48.06N/ 124.70W TO 47.96N/ 124.68W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	9.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	63.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		2215

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99											35
1.00 - 1.49	32	3									524
1.50 - 1.99	485	33									399
2.00 - 2.49	249	150									10
2.50 - 2.99		10									0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	756	202	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 568

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											42
0.50 - 0.99	118	164	133	516	119	27	5				14789
1.00 - 1.49	3255	1275	2109	2089	1193	326	135				12297
1.50 - 1.99	6248	1471	2679	2474	1031	1031	131				10417
2.00 - 2.49	648	727	398	1427	1031	1031	131				6645
2.50 - 2.99		103	398	395	1031	1031	131				4639
3.00 - 3.49		25	111	160	1031	1031	131				3049
3.50 - 3.99			30	1	1031	1031	131				1917
4.00 - 4.49			1	1	1031	1031	131				1066
4.50 - 4.99				5	1031	1031	131				443
5.00 +					1031	1031	131				246
TOTAL	1732	6802	11068	7110	8060	6997	3356	379	0	0	0

MEAN HS(M) = 1.97 LARGEST HS(M) = 6.70 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 26614

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 47.96N/124.68W LAT. LON. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											8
0.50 - 0.99											124
1.00 - 1.49	22	453	544	143	47	10	20				5080
1.50 - 1.99	22	862	2056	1285	1481	181	41				6721
2.00 - 2.49	77	578	1454	1052	1481	181	159				6505
2.50 - 2.99	20	497	674	1329	1849	161	422				6703
3.00 - 3.49		112	432	681	2137	161	718				6120
3.50 - 3.99		21	328	473	1332	375	1079				5125
4.00 - 4.49		70	159	208	1481	181	1853				4758
4.50 - 4.99		1	95	164	480	1901	1629				2037
5.00 +			15	63	112	819	2371				4025
TOTAL	161	2673	5777	6303	9117	13970	10237	1578	18	0	0

MEAN HS(M) = 3.02 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 29145

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.86N/124.68W LAT. LON. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99	3	10	15								13
1.00 - 1.49	87	1500	144	13							277
1.50 - 1.99	18	1280	147	66	253	10					242
2.00 - 2.49		191	217	130	97	18					635
2.50 - 2.99		56	208	111	193	68					635
3.00 - 3.49			109	75	205	77	8				565
3.50 - 3.99			30	47	159	111	16				319
4.00 - 4.49			1	23	131	111	42	3	0	0	281
4.50 - 4.99				6	58	104	74				213
5.00 +											
TOTAL	111	746	771	471	871	456	74	3	0	0	2061

MEAN HS(M) = 3.24 LARGEST HS(M) = 6.76 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 2061

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.86N/124.68W LAT. LON. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99	1										1
1.00 - 1.49	20	16									36
1.50 - 1.99	10	23	1								34
2.00 - 2.49		5									5
2.50 - 2.99			1								1
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	40	43	2	0	0	0	0	0	0	0	85

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.55 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 85

PHASE 3 ST. 5 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.86N/124.68W LAT. LON. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

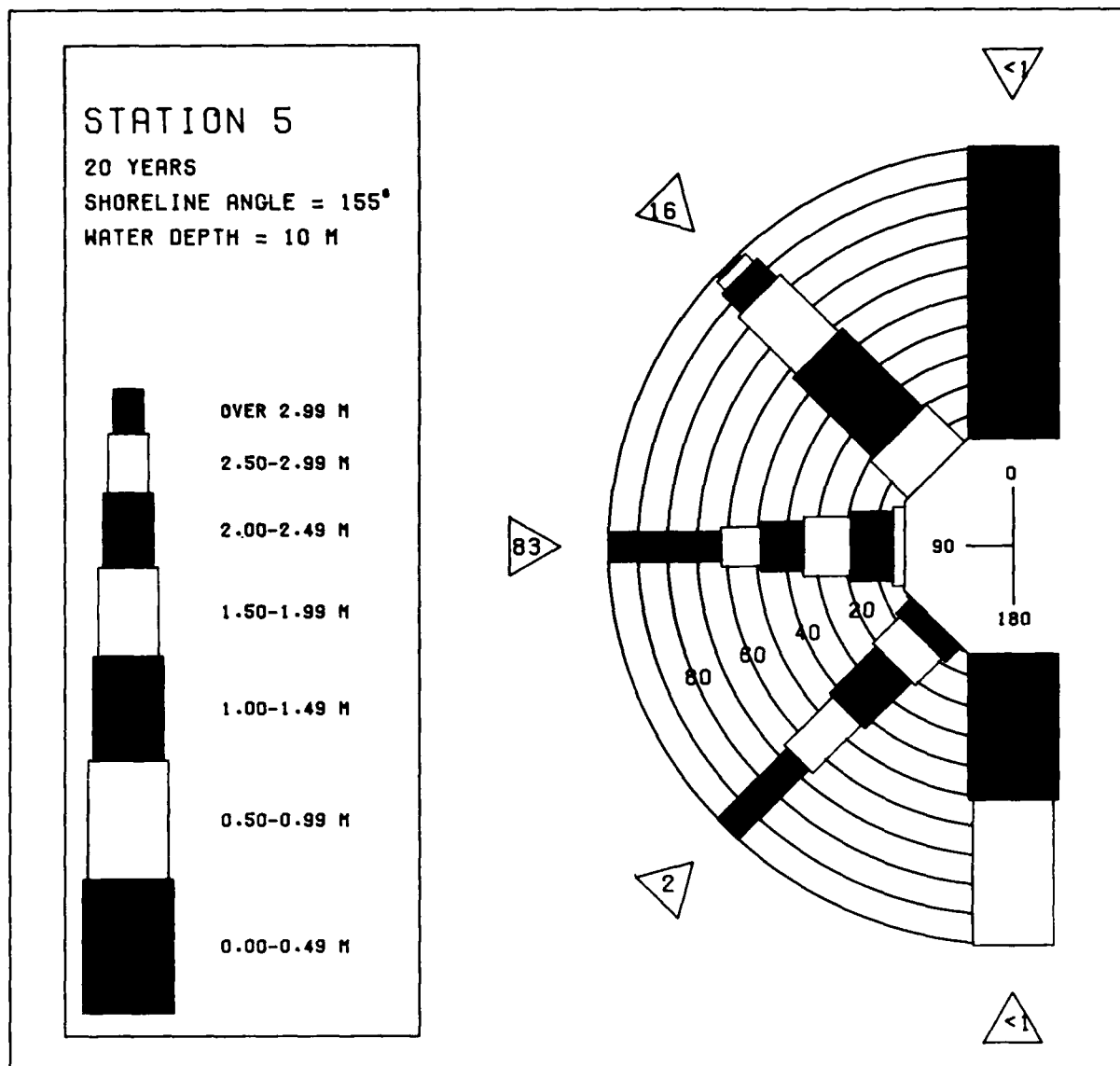
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 5 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 47.96N/124.63W LAT. LONG. END= 47.86N/124.61W
 SHORELINE ANGLE = 155.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)					15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
	6.0	8.0	9.5	10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER			
0.0-0.49	1	1	1	1	14	3	2	1	1	1	1	3	605
0.50-0.99	45	210	265	66	175	50	9	2	2	2	2	2	1800
1.00-1.49	119	347	418	337	346	201	28	1	1	1	1	1	1784
1.50-1.99	107	247	140	244	390	303	187	5	1	1	1	1	1368
2.00-2.49	8	152	90	282	379	402	139	100	1	1	1	1	1168
2.50-2.99	1	15	64	73	235	402	178	100	1	1	1	1	677
3.00-3.49	1	1	31	32	136	350	238	233	1	1	1	1	810
3.50-3.99	1	1	12	22	72	243	235	231	1	1	1	1	605
4.00-4.49	1	1	1	9	37	108	157	94	1	1	1	1	363
4.50-4.99	1	1	1	2	17	75	259	84	1	1	1	1	447
5.00+	1	1	1	2	17	75	259	84	1	1	1	1	447
TOTAL	280	1044	1758	1387	1801	2137	1362	190	1	0	0	0	58440

MEAN HS(M) = 2.54 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 10.8 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 5 (47.96N/ 124.68W TO 47.86N/ 124.61W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63122215

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 47.85N/124.61W LAT. LON. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											78
0.50 - 0.99											2275
1.00 - 1.49											2392
1.50 - 1.99											780
2.00 - 2.49											49
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	2307	3240	27	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.31 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 3261

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											403
0.50 - 0.99											1203
1.00 - 1.49											1203
1.50 - 1.99											1027
2.00 - 2.49											1027
2.50 - 2.99											1027
3.00 - 3.49											1027
3.50 - 3.99											1027
4.00 - 4.49											1027
4.50 - 4.99											1027
5.00 +											1027
TOTAL	469	7842	16367	12150	14181	16719	10016	1052	15	0	0

MEAN HS(M) = 1.97 LARGEST HS(M) = 7.23 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 46198

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99											7
1.00 - 1.49											16
1.50 - 1.99											114
2.00 - 2.49											148
2.50 - 2.99											148
3.00 - 3.49											148
3.50 - 3.99											148
4.00 - 4.49											148
4.50 - 4.99											148
5.00 +											148
TOTAL	310	1893	2345	1579	2578	2567	2009	329	2	0	0

MEAN HS(M) = 3.45 LARGEST HS(M) = 7.43 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 8011

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	5	1	.	.	.	.	.	.	.	.	0
0.5-0.99	92	8	.	.	.	.	.	.	.	.	6
1.0-1.49	106	208	22	5	1	.	.	.	.	.	100
1.5-1.99	10	373	63	.	.	.	.	.	.	.	342
2.0-2.49	.	203	128	13	.	.	.	.	.	.	446
2.5-2.99	.	59	157	17	1	.	.	.	.	.	344
3.0-3.49	.	.	61	23	6	.	.	.	.	.	234
3.5-3.99	.	.	25	3	6	.	.	.	.	.	90
4.0-4.49	.	.	.	.	11	.	.	.	.	.	60
4.5-4.99	.	.	.	.	5	3	.	.	.	.	14
5.0-5.49	.	.	.	.	.	.	.	.	.	.	8
TOTAL	213	852	456	90	30	3	0	0	0	0	969

MEAN HS(M) = 2.53 LARGEST HS(M) = 6.14 MEAN TP(SEC) = 7.6 NUMBER OF CASES = 969

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	.	.	.	.	.	.	.	.	.	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.79 LARGEST HS(M) = 0.79 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 1

PHASE 3 ST. 6 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.86N/124.61W LAT. LON. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 6 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 47.86N/124.61W LAT. LONG. END= 47.83N/124.55W
 SHORELINE ANGLE = 125.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)					18.2-	22.3-	TOTAL
	6.0	8.0	9.5	10.5	10.6-	11.8-	13.4-	15.4-	18.1	22.2	LONGER	
0.00-0.49	110	44	57	19	93	33	4	1	1	1	1	46
0.50-0.99	146	44	27	19	33	17	4	1	1	1	1	33
1.00-1.49	58	12	10	11	41	17	11	1	1	1	1	10
1.50-1.99	5	1	1	1	19	10	13	1	1	1	1	1
2.00-2.49	1	1	1	1	1	1	1	1	1	1	1	1
2.50-2.99	1	1	1	1	1	1	1	1	1	1	1	1
3.00-3.49	1	1	1	1	1	1	1	1	1	1	1	1
3.50-3.99	1	1	1	1	1	1	1	1	1	1	1	1
4.00-4.49	1	1	1	1	1	1	1	1	1	1	1	1
4.50-4.99	1	1	1	1	1	1	1	1	1	1	1	1
5.00-5.49	1	1	1	1	1	1	1	1	1	1	1	1
5.50-5.99	1	1	1	1	1	1	1	1	1	1	1	1
6.00-6.49	1	1	1	1	1	1	1	1	1	1	1	1
6.50-6.99	1	1	1	1	1	1	1	1	1	1	1	1
7.00-7.49	1	1	1	1	1	1	1	1	1	1	1	1
7.50-7.99	1	1	1	1	1	1	1	1	1	1	1	1
8.00-8.49	1	1	1	1	1	1	1	1	1	1	1	1
8.50-8.99	1	1	1	1	1	1	1	1	1	1	1	1
9.00-9.49	1	1	1	1	1	1	1	1	1	1	1	1
9.50-9.99	1	1	1	1	1	1	1	1	1	1	1	1
10.00-10.49	1	1	1	1	1	1	1	1	1	1	1	1
10.50-10.99	1	1	1	1	1	1	1	1	1	1	1	1
11.00-11.49	1	1	1	1	1	1	1	1	1	1	1	1
11.50-11.99	1	1	1	1	1	1	1	1	1	1	1	1
12.00-12.49	1	1	1	1	1	1	1	1	1	1	1	1
12.50-12.99	1	1	1	1	1	1	1	1	1	1	1	1
13.00-13.49	1	1	1	1	1	1	1	1	1	1	1	1
13.50-13.99	1	1	1	1	1	1	1	1	1	1	1	1
14.00-14.49	1	1	1	1	1	1	1	1	1	1	1	1
14.50-14.99	1	1	1	1	1	1	1	1	1	1	1	1
15.00-15.49	1	1	1	1	1	1	1	1	1	1	1	1
15.50-15.99	1	1	1	1	1	1	1	1	1	1	1	1
16.00-16.49	1	1	1	1	1	1	1	1	1	1	1	1
16.50-16.99	1	1	1	1	1	1	1	1	1	1	1	1
17.00-17.49	1	1	1	1	1	1	1	1	1	1	1	1
17.50-17.99	1	1	1	1	1	1	1	1	1	1	1	1
18.00-18.49	1	1	1	1	1	1	1	1	1	1	1	1
18.50-18.99	1	1	1	1	1	1	1	1	1	1	1	1
19.00-19.49	1	1	1	1	1	1	1	1	1	1	1	1
19.50-19.99	1	1	1	1	1	1	1	1	1	1	1	1
20.00-20.49	1	1	1	1	1	1	1	1	1	1	1	1
20.50-20.99	1	1	1	1	1	1	1	1	1	1	1	1
21.00-21.49	1	1	1	1	1	1	1	1	1	1	1	1
21.50-21.99	1	1	1	1	1	1	1	1	1	1	1	1
22.00-22.49	1	1	1	1	1	1	1	1	1	1	1	1
22.50-22.99	1	1	1	1	1	1	1	1	1	1	1	1
23.00-23.49	1	1	1	1	1	1	1	1	1	1	1	1
23.50-23.99	1	1	1	1	1	1	1	1	1	1	1	1
24.00-24.49	1	1	1	1	1	1	1	1	1	1	1	1
24.50-24.99	1	1	1	1	1	1	1	1	1	1	1	1
25.00-25.49	1	1	1	1	1	1	1	1	1	1	1	1
25.50-25.99	1	1	1	1	1	1	1	1	1	1	1	1
26.00-26.49	1	1	1	1	1	1	1	1	1	1	1	1
26.50-26.99	1	1	1	1	1	1	1	1	1	1	1	1
27.00-27.49	1	1	1	1	1	1	1	1	1	1	1	1
27.50-27.99	1	1	1	1	1	1	1	1	1	1	1	1
28.00-28.49	1	1	1	1	1	1	1	1	1	1	1	1
28.50-28.99	1	1	1	1	1	1	1	1	1	1	1	1
29.00-29.49	1	1	1	1	1	1	1	1	1	1	1	1
29.50-29.99	1	1	1	1	1	1	1	1	1	1	1	1
30.00-30.49	1	1	1	1	1	1	1	1	1	1	1	1
30.50-30.99	1	1	1	1	1	1	1	1	1	1	1	1
31.00-31.49	1	1	1	1	1	1	1	1	1	1	1	1
31.50-31.99	1	1	1	1	1	1	1	1	1	1	1	1
32.00-32.49	1	1	1	1	1	1	1	1	1	1	1	1
32.50-32.99	1	1	1	1	1	1	1	1	1	1	1	1
33.00-33.49	1	1	1	1	1	1	1	1	1	1	1	1
33.50-33.99	1	1	1	1	1	1	1	1	1	1	1	1
34.00-34.49	1	1	1	1	1	1	1	1	1	1	1	1
34.50-34.99	1	1	1	1	1	1	1	1	1	1	1	1
35.00-35.49	1	1	1	1	1	1	1	1	1	1	1	1
35.50-35.99	1	1	1	1	1	1	1	1	1	1	1	1
36.00-36.49	1	1	1	1	1	1	1	1	1	1	1	1
36.50-36.99	1	1	1	1	1	1	1	1	1	1	1	1
37.00-37.49	1	1	1	1	1	1	1	1	1	1	1	1
37.50-37.99	1	1	1	1	1	1	1	1	1	1	1	1
38.00-38.49	1	1	1	1	1	1	1	1	1	1	1	1
38.50-38.99	1	1	1	1	1	1	1	1	1	1	1	1
39.00-39.49	1	1	1	1	1	1	1	1	1	1	1	1
39.50-39.99	1	1	1	1	1	1	1	1	1	1	1	1
40.00-40.49	1	1	1	1	1	1	1	1	1	1	1	1
40.50-40.99	1	1	1	1	1	1	1	1	1	1	1	1
41.00-41.49	1	1	1	1	1	1	1	1	1	1	1	1
41.50-41.99	1	1	1	1	1	1	1	1	1	1	1	1
42.00-42.49	1	1	1	1	1	1	1	1	1	1	1	1
42.50-42.99	1	1	1	1	1	1	1	1	1	1	1	1
43.00-43.49	1	1	1	1	1	1	1	1	1	1	1	1
43.50-43.99	1	1	1	1	1	1	1	1	1	1	1	1
44.00-44.49	1	1	1	1	1	1	1	1	1	1	1	1
44.50-44.99	1	1	1	1	1	1	1	1	1	1	1	1
45.00-45.49	1	1	1	1	1	1	1	1	1	1	1	1
45.50-45.99	1	1	1	1	1	1	1	1	1	1	1	1
46.00-46.49	1	1	1	1	1	1	1	1	1	1	1	1
46.50-46.99	1	1	1	1	1	1	1	1	1	1	1	1
47.00-47.49	1	1	1	1	1	1	1	1	1	1	1	1
47.50-47.99	1	1	1	1	1	1	1	1	1	1	1	1
48.00-48.49	1	1	1	1	1	1	1	1	1	1	1	1
48.50-48.99	1	1	1	1	1	1	1	1	1	1	1	1
49.00-49.49	1	1	1	1	1	1	1	1	1	1	1	1
49.50-49.99	1	1	1	1	1	1	1	1	1	1	1	1
50.00-50.49	1	1	1	1	1	1	1	1	1	1	1	1
50.50-50.99	1	1	1	1	1	1	1	1	1	1	1	1
51.00-51.49	1	1	1	1	1	1	1	1	1	1	1	1
51.50-51.99	1	1	1	1	1	1	1	1	1	1	1	1
52.00-52.49	1	1	1	1	1	1	1	1	1	1	1	1
52.50-52.99	1	1	1	1	1	1	1	1	1	1	1	1
53.00-53.49	1	1	1	1	1	1	1	1	1	1	1	1
53.50-53.99	1	1	1	1	1	1	1	1	1	1	1	1
54.00-54.49	1	1	1	1	1	1	1	1	1	1	1	1
54.50-54.99	1	1	1	1	1	1	1	1	1	1	1	1
55.00-55.49	1	1	1	1	1	1	1	1	1	1	1	1
55.50-55.99	1	1	1	1	1	1	1	1	1	1	1	1
56.00-56.49	1	1	1	1	1	1	1	1	1	1	1	1
56.50-56.99	1	1	1	1	1	1	1	1	1	1	1	1
57.00-57.49	1	1	1	1	1	1	1	1	1	1	1	1
57.50-57.99	1	1	1	1	1	1	1	1	1	1	1	1
58.00-58.49	1	1	1	1	1	1	1	1	1	1	1	1
58.50-58.99	1	1	1	1	1	1	1	1	1	1	1	1
59.00-59.49	1	1	1	1	1	1	1	1	1	1	1	1
59.50-59.99	1	1	1	1	1	1	1	1	1	1	1	1
60.00-60.49	1	1	1	1	1	1	1	1	1	1	1	1
60.50-60.99	1	1	1	1	1	1	1	1	1	1	1	1
61.00-61.49	1	1	1	1	1	1	1	1	1	1	1	1
61.50-61.99	1	1	1	1	1	1	1	1	1	1	1	1
62.00-62.49	1	1	1	1	1	1	1	1	1	1	1	1
62.50-62.99	1	1	1	1	1	1	1	1	1	1	1	1
63.00-63.49	1	1	1	1	1	1	1	1	1	1	1	1
63.50-63.99	1	1	1	1								

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 6 (47.86N/ 124.61W TO 47.83N/ 124.55W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	3.3	3.1	2.6	1.9	1.4	1.3	1.1	1.0	1.4	2.2	2.9	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 6 (47.86N/ 124.61W TO 47.83N/ 124.55W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

20 YR. STATISTICS FOR PACIFIC STATION 6 (47.86N/ 124.61W TO 47.83N/ 124.55W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.1
MOST FREQUENT WAVE DIRECTION	(DEGREES)	60
STANDARD DEVIATION OF WAVE HEIGHT	(METERS)	0.5
STANDARD DEVIATION OF WAVE PERIOD	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	16.4
WAVE TO ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	86
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	69
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		19721200

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	- 0											0
0.1	- 0											0
0.2	- 0											0
0.3	- 0											0
0.4	- 0											0
0.5	- 0											0
0.6	- 0											0
0.7	- 0											0
0.8	- 0											0
0.9	- 0											0
1.0	- 0											0
1.1	- 0											0
1.2	- 0											0
1.3	- 0											0
1.4	- 0											0
1.5	- 0											0
1.6	- 0											0
1.7	- 0											0
1.8	- 0											0
1.9	- 0											0
2.0	- 0											0
2.1	- 0											0
2.2	- 0											0
2.3	- 0											0
2.4	- 0											0
2.5	- 0											0
2.6	- 0											0
2.7	- 0											0
2.8	- 0											0
2.9	- 0											0
3.0	- 0											0
3.1	- 0											0
3.2	- 0											0
3.3	- 0											0
3.4	- 0											0
3.5	- 0											0
3.6	- 0											0
3.7	- 0											0
3.8	- 0											0
3.9	- 0											0
4.0	- 0											0
4.1	- 0											0
4.2	- 0											0
4.3	- 0											0
4.4	- 0											0
4.5	- 0											0
4.6	- 0											0
4.7	- 0					</						

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0	436	317	278	799	162	61	15	15	.	.	74
0.1	0	436	317	278	799	162	61	15	15	.	.	26
0.2	0	436	317	278	799	162	61	15	15	.	.	26
0.3	0	436	317	278	799	162	61	15	15	.	.	26
0.4	0	436	317	278	799	162	61	15	15	.	.	26
0.5	0	436	317	278	799	162	61	15	15	.	.	26
0.6	0	436	317	278	799	162	61	15	15	.	.	26
0.7	0	436	317	278	799	162	61	15	15	.	.	26
0.8	0	436	317	278	799	162	61	15	15	.	.	26
0.9	0	436	317	278	799	162	61	15	15	.	.	26
1.0	0	436	317	278	799	162	61	15	15	.	.	26
1.1	0	436	317	278	799	162	61	15	15	.	.	26
1.2	0	436	317	278	799	162	61	15	15	.	.	26
1.3	0	436	317	278	799	162	61	15	15	.	.	26
1.4	0	436	317	278	799	162	61	15	15	.	.	26
1.5	0	436	317	278	799	162	61	15	15	.	.	26
1.6	0	436	317	278	799	162	61	15	15	.	.	26
1.7	0	436	317	278	799	162	61	15	15	.	.	26
1.8	0	436	317	278	799	162	61	15	15	.	.	26
1.9	0	436	317	278	799	162	61	15	15	.	.	26
2.0	0	436	317	278	799	162	61	15	15	.	.	26
2.1	0	436	317	278	799	162	61	15	15	.	.	26
2.2	0	436	317	278	799	162	61	15	15	.	.	26
2.3	0	436	317	278	799	162	61	15	15	.	.	26
2.4	0	436	317	278	799	162	61	15	15	.	.	26
2.5	0	436	317	278	799	162	61	15	15	.	.	26
2.6	0	436	317	278	799	162	61	15	15	.	.	26
2.7	0	436	317	278	799	162	61	15	15	.	.	26
2.8	0	436	317	278	799	162	61	15	15	.	.	26
2.9	0	436	317	278	799	162	61	15	15	.	.	26
3.0	0	436	317	278	799	162	61	15	15	.	.	26
3.1	0	436	317	278	799	162	61	15	15	.	.	26
3.2	0	436	317	278	799	162	61	15	15	.	.	26
3.3	0	436	317	278	799	162	61	15	15	.	.	26
3.4	0	436	317	278	799	162	61	15	15	.	.	26
3.5	0	436	317	278	799	162	61	15	15	.	.	26
3.6	0	436	317	278	799	162	61	15	15	.	.	26
3.7	0	436	317	278	799	162	61	15	15	.	.	26
3.8	0	436	317	278	799	162	61	15	15	.	.	26
3.9	0	436	317	278	799	162	61	15	15	.	.	26
4.0	0	436	317	278	799							

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0	25	253	260	44	10	6	15	1	.	.	1
0.1	0	5	509	1071	768	292	92	10	1	.	.	594
0.2	0	1	311	836	1081	242	53	123	1	.	.	26
0.3	0	0	311	836	1081	242	53	123	27	15	.	108
0.4	0	0	29	580	823	1214	963	390	44	10	.	557
0.5	0	0	533	429	533	1020	1010	598	44	.	.	424
0.6	0	0	33	373	427	1020	1225	997	47	.	.	108
0.7	0	0	3	239	191	740	1330	1680	97	3	.	48
0.8	0	0	.	114	172	489	1502	1664	114	.	.	308
0.9	0	0	.	17	82	233	638	1363	135	.	.	555
1.0	0	0	.	20	82	140	636	2017	761	.	.	528
1.1	0	0	.	20	82	140	636	2017	761	.	.	528
1.2	0	0	.	20	82	140	636	2017	761	.	.	528
1.3	0	0	.	20	82	140	636	2017	761	.	.	528
1.4	0	0	.	20	82	140	636	2017	761	.	.	528
1.5	0	0	.	20	82	140	636	2017	761	.	.	528
1.6	0	0	.	20	82	140	636	2017	761	.	.	528
1.7	0	0	.	20	82	140	636	2017	761	.	.	528
1.8	0	0	.	20	82	140	636	2017	761	.	.	528
1.9	0	0	.	20	82	140	636	2017	761	.	.	528
2.0	0	0	.	20	82	140	636	2017	761	.	.	528
2.1	0	0	.	20	82	140	636	2017	761	.	.	528
2.2	0	0	.	20	82	140	636	2017	761	.	.	528
2.3	0	0	.	20	82	140	636	2017	761	.	.	528
2.4	0	0	.	20	82	140	636	2017	761	.	.	528
2.5	0	0	.	20	82	140	636	2017	761	.	.	528
2.6	0	0	.	20	82	140	636	2017	761	.	.	528
2.7	0	0	.	20	82	140	636	2017	761	.	.	528
2.8	0	0	.	20	82	140	636	2017	761	.	.	528
2.9	0	0	.	20	82	140	636	2017	761	.	.	528
3.0	0	0	.	20	82	140	636	2017	761	.	.	528
3.1	0	0	.	20	82	140	636	2017	761	.	.	528
3.2	0	0	.	20	82	140	636	2017	761	.	.	528
3.3	0	0	.	20	82	140	636	2017	761	.	.	528
3.4	0	0	.	20	82	140	636	2017	761	.	.	528
3.5	0	0	.	20	82	140	636	2017	761	.	.	528
3.6	0	0	.	20	82	140	636	2017	761	.	.	528
3.7	0	0	.	20	82	140	636	2017	761	.	.	528
3.8	0	0	.	20	82	140	636	2017	761	.	.	528
3.9	0	0	.	20	82	140	636	2017	761	.	.	528
4.0	0	0	.	20	82	140	636	2017	761	.	.	528
4.1	0	0	.	20	82	14						

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 47.83N/124.55W LAT. LONG. END= 47.76N/124.48W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	17	3	11	1	8	1	1	1	1	1
0.50-0.99	1	165	3	11	1	8	1	1	1	1	1
1.00-1.49	1	165	3	11	1	8	1	1	1	1	1
1.50-1.99	1	165	3	11	1	8	1	1	1	1	1
2.00-2.49	1	165	3	11	1	8	1	1	1	1	1
2.50-2.99	1	165	3	11	1	8	1	1	1	1	1
3.00-3.49	1	165	3	11	1	8	1	1	1	1	1
3.50-3.99	1	165	3	11	1	8	1	1	1	1	1
4.00-4.49	1	165	3	11	1	8	1	1	1	1	1
4.50-4.99	1	165	3	11	1	8	1	1	1	1	1
5.00+	1	165	3	11	1	8	1	1	1	1	1
TOTAL	124	717	649	415	575	225	28	0	0	0	1610

MEAN HS(M) = 3.08 LARGEST HS(M) = 6.98 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 1610

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 47.83N/124.55W LAT. LONG. END= 47.76N/124.48W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	1
0.50-0.99	1	1	1	1	1	1	1	1	1	1	1
1.00-1.49	1	1	1	1	1	1	1	1	1	1	1
1.50-1.99	1	1	1	1	1	1	1	1	1	1	1
2.00-2.49	1	1	1	1	1	1	1	1	1	1	1
2.50-2.99	1	1	1	1	1	1	1	1	1	1	1
3.00-3.49	1	1	1	1	1	1	1	1	1	1	1
3.50-3.99	1	1	1	1	1	1	1	1	1	1	1
4.00-4.49	1	1	1	1	1	1	1	1	1	1	1
4.50-4.99	1	1	1	1	1	1	1	1	1	1	1
5.00+	1	1	1	1	1	1	1	1	1	1	1
TOTAL	13	8	0	0	0	0	0	0	0	0	15

MEAN HS(M) = 1.16 LARGEST HS(M) = 1.51 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 15

PHASE 3 ST. 7 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 47.83N/124.55W LAT. LONG. END= 47.76N/124.48W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	1
0.50-0.99	1	1	1	1	1	1	1	1	1	1	1
1.00-1.49	1	1	1	1	1	1	1	1	1	1	1
1.50-1.99	1	1	1	1	1	1	1	1	1	1	1
2.00-2.49	1	1	1	1	1	1	1	1	1	1	1
2.50-2.99	1	1	1	1	1	1	1	1	1	1	1
3.00-3.49	1	1	1	1	1	1	1	1	1	1	1
3.50-3.99	1	1	1	1	1	1	1	1	1	1	1
4.00-4.49	1	1	1	1	1	1	1	1	1	1	1
4.50-4.99	1	1	1	1	1	1	1	1	1	1	1
5.00+	1	1	1	1	1	1	1	1	1	1	1
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 7 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 47.83N/124.55W LAT. LON. END= 47.76N/124.48W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	53	246	304	84	17	6	2	1	1	1	5
0.50-0.99	121	387	766	365	201	62	11	2	1	1	712
1.00-1.49	78	228	378	441	374	226	31	3	1	1	1915
1.50-1.99	7	144	135	249	392	334	111	7	1	1	1759
2.00-2.49	..	58	87	111	354	394	142	9	1	1	1380
2.50-2.99	..	15	69	72	211	337	187	13	1	1	1155
3.00-3.49	..	..	34	30	121	331	239	22	1	1	954
3.50-3.99	..	..	14	23	69	211	226	22	1	1	777
4.00-4.49	..	..	2	10	37	91	173	20	1	1	565
4.50-4.99	..	..	..	..	19	72	225	87	1	1	333
5.00+	..	..	..	..	..	..	..	..	..	..	405
TOTAL	261	1078	1791	1387	1795	2114	1347	186	1	0	58440

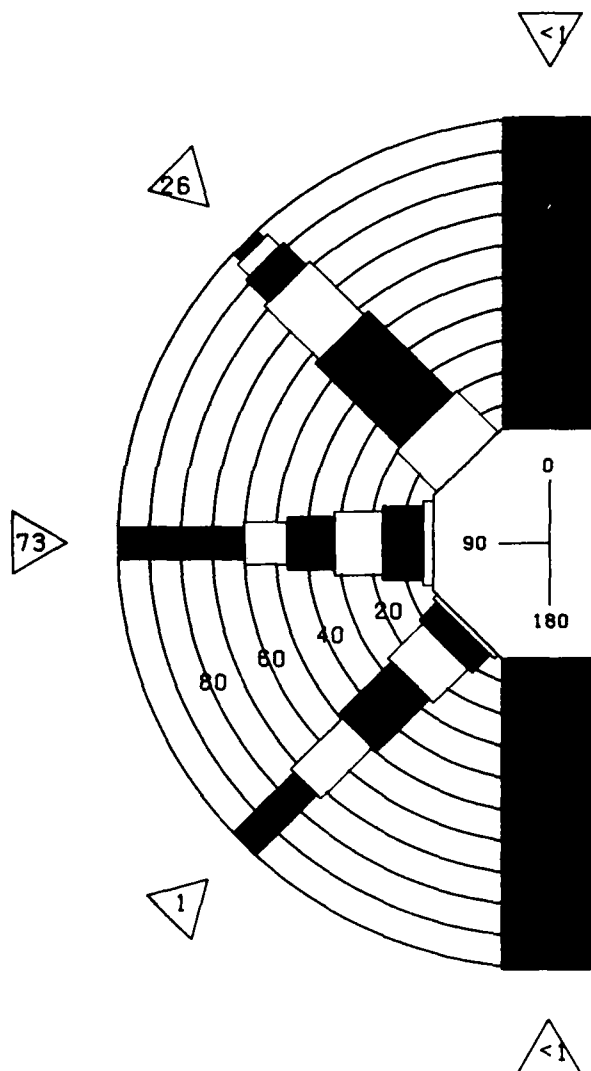
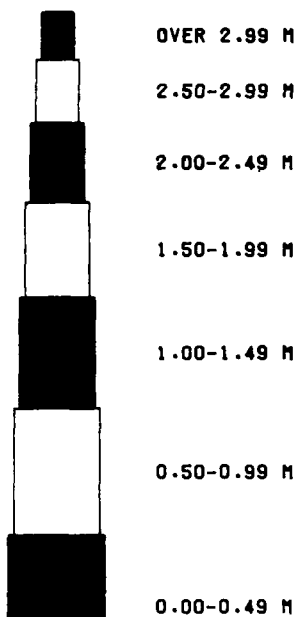
MEAN HS(M) = 2.47 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 10.8 TOTAL CASES = 58440

STATION 7

20 YEARS

SHORELINE ANGLE = 148°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
 HIS STATION 7 (47.83N/ 124.55W TO 47.76N/ 124.48W)
 MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	3.5	3.0	2.3	1.7	1.5	1.3	1.2	1.7	2.6	3.3	3.9
1957												
1958												
1959												
1960												
1961												
1962												
1963												
1964												
1965												
1966												
1967												
1968												
1969												
1970												
1971												
1972												
1973												
1974												
1975												
MEAN	3.7	3.5	3.0	2.3	1.7	1.5	1.3	1.2	1.7	2.6	3.3	3.9

LARGEST HS(METERS) BY MONTH AND YEAR
 HIS STATION 7 (47.83N/ 124.55W TO 47.76N/ 124.48W)
 MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1957	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1958	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1959	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1960	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1961	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1962	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1963	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1964	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1965	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1966	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1967	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1968	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1969	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1970	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1971	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1972	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1973	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1974	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
1975	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9

20 YR. STATISTICS FOR PACIFIC STATION 7 (47.83N/ 124.55W TO 47.76N/ 124.48W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.0
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73012318

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 47.76N/124.48W LAT. LONG. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 47.76N/124.48W LAT. LONG. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	11	.	.	.	.	.	.	.	.	13
0.50 - 0.99	207	11	.	.	.	.	.	.	.	.	218
1.00 - 1.49	870	121	.	.	.	.	.	.	.	.	991
1.50 - 1.99	136	63	.	.	.	.	.	.	.	.	199
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1226	196	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.25 LARGEST HS(M) = 2.02 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 834

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 47.76N/124.48W LAT. LONG. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	637	200	109	105	489	220	9	13	.	.	294
0.50 - 0.99	1000	331	130	109	2408	1115	2	5	.	.	1082
1.00 - 1.49	3000	2012	767	2574	3709	1899	114	5	.	.	3003
1.50 - 1.99	3000	2012	767	2574	3709	1899	417	3	.	.	3003
2.00 - 2.49	3000	2012	767	2574	3709	1899	564	3	.	.	3003
2.50 - 2.99	3000	2012	767	2574	3709	1899	641	5	.	.	3003
3.00 - 3.49	3000	2012	767	2574	3709	1899	615	6	.	.	3003
3.50 - 3.99	3000	2012	767	2574	3709	1899	641	6	.	.	3003
4.00 - 4.49	3000	2012	767	2574	3709	1899	349	4	.	.	3003
4.50 - 4.99	3000	2012	767	2574	3709	1899	368	3	.	.	3003
5.00 +	3000	2012	767	2574	3709	1899	172	3	.	.	3003
TOTAL	1533	7515	15596	11126	13072	12620	3167	354	0	0	1538

MEAN HS(M) = 1.80 LARGEST HS(M) = 6.34 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 37998

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 47.76N/124.48W LAT. LONG. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	13	22	10	169	54	13	1	11	.	.	36
0.50 - 0.99	13	234	429	169	54	13	1	11	.	.	36
1.00 - 1.49	39	326	776	812	516	318	77	49	.	.	36
1.50 - 1.99	154	359	604	403	816	78	366	78	.	.	36
2.00 - 2.49	59	303	456	445	924	1279	819	59	.	.	36
2.50 - 2.99	17	217	323	381	1402	1365	104	15	.	.	36
3.00 - 3.49	13	217	323	381	1402	1365	104	15	.	.	36
3.50 - 3.99	13	217	323	381	1402	1365	104	15	.	.	36
4.00 - 4.49	13	217	323	381	1402	1365	104	15	.	.	36
4.50 - 4.99	13	217	323	381	1402	1365	104	15	.	.	36
5.00 +	13	217	323	381	1402	1365	104	15	.	.	36
TOTAL	265	1657	3235	2855	4292	6620	2804	1411	63	0	17097

MEAN HS(M) = 2.86 LARGEST HS(M) = 6.79 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 17097

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	6	20	1	.	.	.	.	.	.	.	.	0
0.50-0.99	41	107	37	.	.	.	.	.	.	.	.	27
1.00-1.49	162	287	88	13	8	.	.	.	.	.	.	127
1.50-1.99	44	420	111	80	46	.	.	.	.	.	.	558
2.00-2.49	.	106	227	147	114	5	.	.	.	.	.	846
2.50-2.99	.	30	160	133	163	15	.	.	.	.	.	715
3.00-3.49	.	.	34	41	205	23	5	.	.	.	.	557
3.50-3.99	.	.	5	23	143	61	5	.	.	.	.	284
4.00-4.49	.	.	.	6	56	34	1	.	.	.	.	119
4.50-4.99	.	.	.	.	39	32	11	.	.	.	.	88
5.00+	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	253	1272	1042	639	809	175	28	0	0	0	0	2480

MEAN HS(M) = 2.88 LARGEST HS(M) = 6.87 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 2480

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	.	.	.	.	.	.	.	.	.	.	1
0.50-0.99	13	.	.	.	.	.	.	.	.	.	.	13
1.00-1.49	20	3	.	.	.	.	.	.	.	.	.	23
1.50-1.99	3	10	.	.	.	.	.	.	.	.	.	13
2.00-2.49	.	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	37	13	0	0	0	0	0	0	0	0	0	31

MEAN HS(M) = 1.18 LARGEST HS(M) = 1.87 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 31

PHASE 3 ST. 8 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 8 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 47.76N/124.48W LAT. LON. END= 47.70N/124.43W
 SHORELINE ANGLE = 149.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0-	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER		32
0.0-0.49	10	9	11	15	54	23	12	1	1	1	1	1107
0.50-0.99	147	358	530	510	316	143	19	1	1	1	1	2298
1.00-1.49	72	317	400	405	412	267	178	1	1	1	1	1711
1.50-1.99	84	164	239	255	423	392	138	1	1	1	1	1417
2.00-2.49	14	128	186	186	298	407	200	1	1	1	1	1166
2.50-2.99	.	18	55	56	168	345	222	1	1	1	1	895
3.00-3.49	.	4	11	11	79	202	223	1	1	1	1	587
3.50-3.99	.	.	1	1	38	87	159	1	1	1	1	330
4.00-4.49	.	.	.	.	16	34	69	1	1	1	1	169
4.50-4.99	.	.	.	.	10	10	10	1	1	1	1	157
5.00+	.	.	.	.	10	10	10	1	1	1	1	157
TOTAL	330	1062	1984	1458	1814	1938	1196	173	4	0		58440

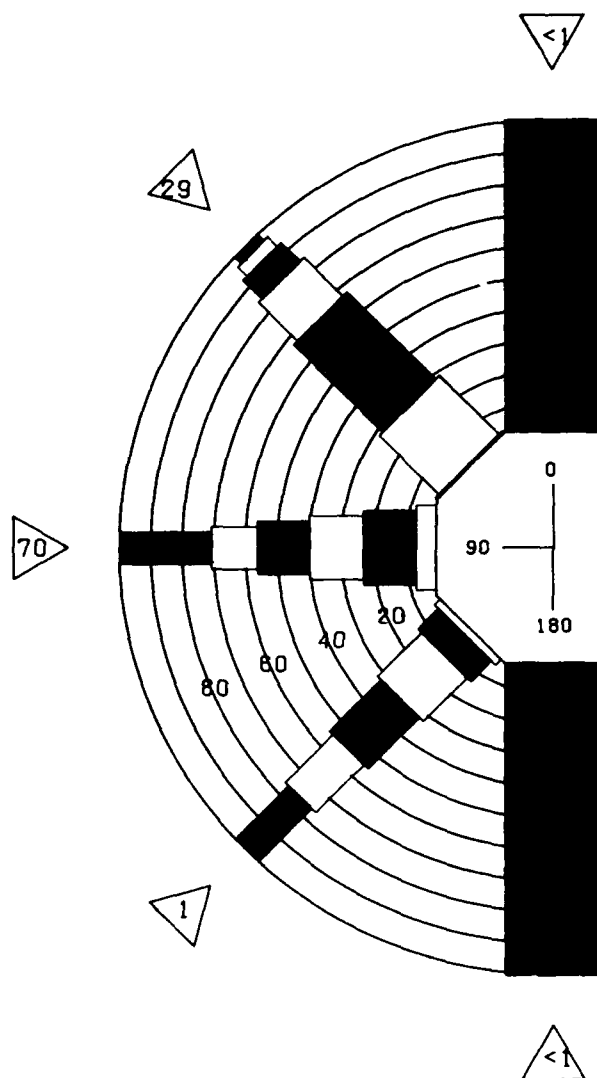
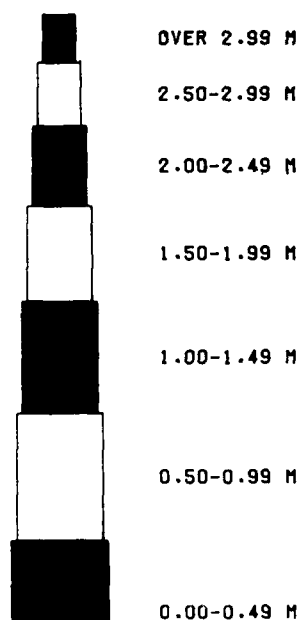
MEAN HS(M) = 2.15 LARGEST HS(M) = 6.87 MEAN TP(SEC) = 10.6 TOTAL CASES = 58440

STATION 8

20 YEARS

SHORELINE ANGLE = 149°

WATER DEPTH = 10 M



WIS STATION 8 (47.76N/ 124.48W TO 47.70N/ 124.43W)

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

[illegible]

WIS STATION 8 (47.76N/ 124.48W TO 47.70N/ 124.43W)

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

[illegible]

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	6.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	106.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		721221612

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 47.70N/124.43W LAT. LONG. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.00	0
1.01-1.50	0
1.51-2.00	0
2.01-2.50	0
2.51-3.00	0
3.01-3.50	0
3.51-4.00	0
4.01-4.50	0
4.51-5.00	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 47.70N/124.43W LAT. LONG. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-1.00	37	.	.	.	.	.	.	.	.	.	37
1.01-1.50	130	8	.	.	.	.	.	.	.	.	138
1.51-2.00	1	11	.	.	.	.	.	.	.	.	12
2.01-2.50	.	.	.	.	.	.	.	.	.	.	0
2.51-3.00	.	.	.	.	.	.	.	.	.	.	0
3.01-3.50	.	.	.	.	.	.	.	.	.	.	0
3.51-4.00	.	.	.	.	.	.	.	.	.	.	0
4.01-4.50	.	.	.	.	.	.	.	.	.	.	0
4.51-5.00	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	168	19	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.19 LARGEST HS(M) = 1.66 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 111

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 47.70N/124.43W LAT. LONG. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	80	25	35	20	78	66	5	.	.	.	141
0.50-1.00	549	2079	1582	280	605	270	5	.	.	.	4639
1.01-1.50	1090	2691	3254	723	540	497	78	.	.	.	5889
1.51-2.00	864	1047	1718	838	351	379	130	.	.	.	2851
2.01-2.50	49	568	477	687	672	282	83	.	.	.	1648
2.51-3.00	.	1598	167	289	467	204	63	.	.	.	266
3.01-3.50	.	25	73	97	201	233	23	.	.	.	504
3.51-4.00	.	.	1	5	46	181	25	.	.	.	258
4.01-4.50	.	.	.	.	10	58	13	.	.	.	86
4.51-5.00	.	.	.	.	1	32	17	.	.	.	50
5.00+	.	.	.	.	1	32	17	.	.	.	50
TOTAL	2632	6590	7315	2930	2981	2228	448	0	0	0	0

MEAN HS(M) = 1.65 LARGEST HS(M) = 6.10 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 14701

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 47.70N/124.43W LAT. LONG. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	36	47	35	9	25	40	2	.	.	.	97
0.50-1.00	30	674	2715	913	1976	812	232	11	.	.	4668
1.01-1.50	82	1339	4897	3841	1478	1010	155	44	.	.	12668
1.51-2.00	35	1122	1813	1608	777	505	136	71	10	.	11511
2.01-2.50	.	114	390	164	126	79	11	10	.	.	1000
2.51-3.00	.	27	143	54	149	100	20	1	.	.	333
3.01-3.50	.	.	22	27	13	32	3	1	.	.	99
3.51-4.00	.	.	10	10	3	48	3	1	.	.	74
4.01-4.50	.	.	.	.	.	3	3	.	.	.	6
4.51-5.00	.	.	.	.	.	3	3	.	.	.	6
5.00+	.	.	.	.	.	3	3	.	.	.	6
TOTAL	191	1754	10398	10727	13981	16919	11803	1854	71	0	0

MEAN HS(M) = 2.40 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 39589

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	38	61	1	90	43	10	13	1	1	1	3
0.50 - 0.99	123	200	1	174	100	35	10	1	1	1	364
1.00 - 1.49	51	81	1	297	163	67	13	1	1	1	544
1.50 - 1.99	..	248	1	188	108	136	110	1	1	1	1071
2.00 - 2.49	..	82	1	97	113	169	122	1	1	1	737
2.50 - 2.99	..	..	1	61	155	167	122	1	1	1	467
3.00 - 3.49	..	..	..	22	70	101	25	1	1	1	236
3.50 - 3.99	..	..	..	..	39	90	102	1	1	1	238
4.00 - 4.49	..	..	..	..	..	..	..	..	..	..	..
4.50 - 4.99	..	..	..	..	..	..	..	..	..	..	..
5.00 +	..	..	..	..	..	..	..	..	..	..	..
TOTAL	235	1387	1653	935	1478	805	201	4	0	0	3928

MEAN HS(M) = 2.88 LARGEST HS(M) = 6.45 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 3928

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	..	..	..	..	..	..	..	..	..	3
0.50 - 0.99	13	..	..	..	..	..	..	..	..	..	13
1.00 - 1.49	47	..	..	..	..	..	..	..	..	..	47
1.50 - 1.99	72	..	..	..	..	..	..	..	..	..	72
2.00 - 2.49	44	..	..	..	..	..	..	..	..	..	44
2.50 - 2.99	6	..	..	..	..	..	..	..	..	..	6
3.00 - 3.49	0	..	..	..	..	..	..	..	..	..	0
3.50 - 3.99	0	..	..	..	..	..	..	..	..	..	0
4.00 - 4.49	0	..	..	..	..	..	..	..	..	..	0
4.50 - 4.99	0	..	..	..	..	..	..	..	..	..	0
5.00 +	0	..	..	..	..	..	..	..	..	..	0
TOTAL	69	116	0	0	0	0	0	0	0	0	111

MEAN HS(M) = 1.66 LARGEST HS(M) = 2.82 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 111

PHASE 3 ST. 9 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.70N/124.43W LAT. LON. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

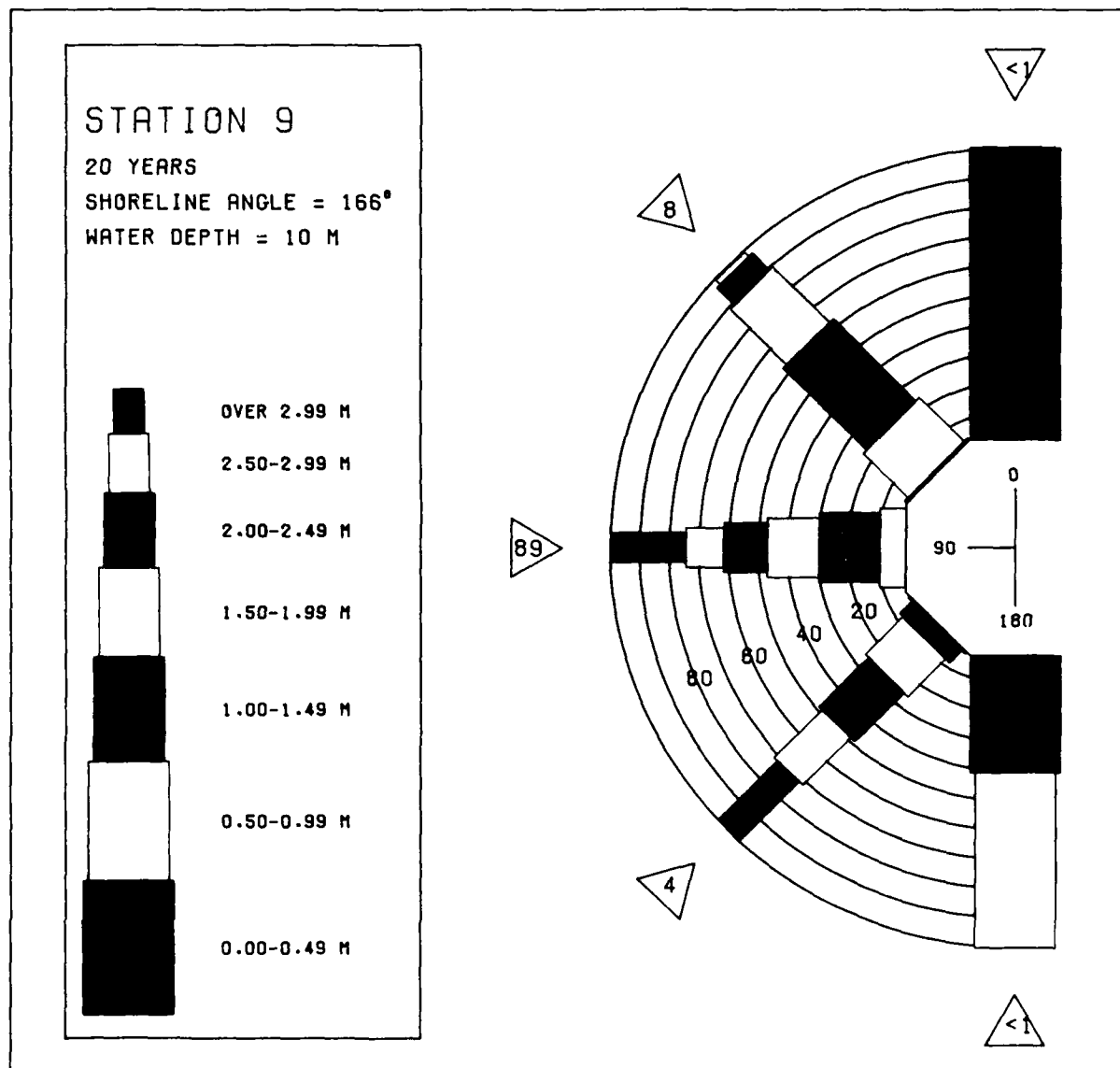
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 9 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 47.70N/124.43W LAT. LONG. END= 47.60N/124.40W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	64	281	429	118	33	11	2	1	1	1	23
0.50-0.99	132	340	828	456	258	108	13	4	1	1	939
1.00-1.49	111	166	382	436	406	352	54	7	1	1	1810
1.50-1.99	14	124	136	248	432	362	126	8	1	1	1450
2.00-2.49	..	52	78	115	159	417	195	15	2	1	1233
2.50-2.99	..	13	47	54	211	380	212	24	1	1	842
3.00-3.49	..	..	19	18	97	125	250	21	..	..	666
3.50-3.99	..	..	6	9	33	125	189	21	..	..	383
4.00-4.49	..	..	1	3	9	44	108	28	..	..	198
4.50-4.99	..	..	..	..	4	27	92	51	..	..	174
5.00+	..	..	..	..	..	..	..	..	..	..	..
TOTAL	329	983	1933	1457	1842	1992	1241	181	5	0	5840

MEAN HS(M) = 2.24 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 10.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 9 (47.70N/ 124.43W TO 47.60N/ 124.40W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1999	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1998	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1997	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1996	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1995	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1994	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1993	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1992	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1991	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1990	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1989	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1988	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1987	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1986	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1985	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1984	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1983	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1982	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1981	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1980	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1979	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1978	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1977	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1976	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1
1975	3.3	3.2	2.7	2.2	1.6	1.4	1.2	1.2	1.5	2.4	3.0	3.4	2.1

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 9 (47.70N/ 124.43W TO 47.60N/ 124.40W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1999	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1998	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1997	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1996	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1995	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1994	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1993	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1992	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1991	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1990	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1989	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1988	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1987	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1986	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1985	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1984	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1983	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1982	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1981	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1980	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1979	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1978	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1977	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1976	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5
1975	4.0	3.5	3.0	2.5	2.0	1.5	1.0	1.0	1.5	3.0	4.0	4.5	2.5

20 YR. STATISTICS FOR PACIFIC STATION 9 (47.70N/ 124.43W TO 47.60N/ 124.40W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	72
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		72122512

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 47.60N/124.40W LAT. LONG. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 47.60N/124.40W LAT. LONG. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	17	.	.	.	.	.	.	.	.	.	17
1.00-1.49	88	.	.	.	.	.	.	.	.	.	88
1.50-1.99	20	.	.	.	.	.	.	.	.	.	20
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	125	0	0	0	0	0	0	0	0	0	125

MEAN HS(M) = 1.26 LARGEST HS(M) = 1.87 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 74

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 47.60N/124.40W LAT. LONG. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	32	20	18	10	30	15	.	.	.	.	70
0.50-0.99	494	1327	1288	244	783	114	.	.	.	.	3399
1.00-1.49	1031	3334	2369	847	423	114	.	.	.	.	7187
1.50-1.99	989	1014	1187	869	793	171	.	.	.	.	5223
2.00-2.49	53	610	290	456	634	393	.	.	.	.	2441
2.50-2.99	.	172	140	225	544	340	.	.	.	.	1431
3.00-3.49	.	23	78	53	371	157	.	.	.	.	688
3.50-3.99	.	.	8	17	116	140	.	.	.	.	281
4.00-4.49	.	.	1	5	23	116	.	.	.	.	145
4.50-4.99	.	.	.	.	6	22	.	.	.	.	28
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2599	5500	5379	2722	3019	1673	1	0	0	0	12226

MEAN HS(M) = 1.64 LARGEST HS(M) = 4.93 MEAN TP(SEC) = 8.7 NUMBER OF CASES = 12226

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 47.60N/124.40W LAT. LONG. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	54	42	1	198	63	34	18	.	.	177
0.50-0.99	41	829	2701	901	2215	812	143	53	.	.	4772
1.00-1.49	22	511	5448	3757	3335	2315	523	83	.	.	12967
1.50-1.99	59	181	1873	3425	3376	2332	1391	15	.	.	11953
2.00-2.49	22	212	429	1493	3546	2411	2246	90	.	.	11033
2.50-2.99	.	87	135	496	1163	3335	2748	22	.	.	10390
3.00-3.49	.	27	73	236	116	330	217	6	.	.	820
3.50-3.99	.	.	46	47	458	371	282	3	.	.	6056
4.00-4.49	.	.	10	17	131	871	3369	5	.	.	4885
4.50-4.99	.	.	1	8	27	128	1291	.	.	.	1956
5.00+	.	.	.	.	.	160	879	629	.	.	1668
TOTAL	145	1901	10758	10378	13939	19200	14367	2127	83	0	42627

MEAN HS(M) = 2.44 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 42627

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99		5	23	3							84
1.00 - 1.49		22	162	23	5						408
1.50 - 1.99		107	296	227	140	37					812
2.00 - 2.49		32	249	309	181	35					1006
2.50 - 2.99			174	328	200	104	8				1148
3.00 - 3.49			42	183	177	159	13				941
3.50 - 3.99			1	71	65	188	34				673
4.00 - 4.49				20	44	169	46				467
4.50 - 4.99					17	80	30				177
5.00 +				6	22	82	73	13			196
TOTAL	166	977	1357	900	1410	822	204	16	0	0	3436

MEAN HS(M) = 2.84 LARGEST HS(M) = 6.53 MEAN TP(SEC) = 9.9 NUMBER OF CASES = 3436

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99		13	1								14
1.00 - 1.49		6	20								26
1.50 - 1.99		25	34								59
2.00 - 2.49			13								16
2.50 - 2.99			6								9
3.00 - 3.49			3								6
3.50 - 3.99											0
4.00 - 4.49			1								1
4.50 - 4.99											0
5.00 +											0
TOTAL	44	74	7	0	0	0	0	0	0	0	77

MEAN HS(M) = 1.67 LARGEST HS(M) = 3.51 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 77

PHASE 3 ST. 10 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 10 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 47.60N/124.40W LAT. LON. END= 47.48N/124.35W
 SHORELINE ANGLE = 171.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	57	221	401	114	22	7	3	1	1	1	18
0.50-0.99	117	302	801	462	271	92	14	5	1	1	82
1.00-1.49	120	153	328	433	431	269	152	8	1	1	206
1.50-1.99	10	108	103	214	343	405	329	14	1	1	148
2.00-2.49	..	44	60	84	190	505	325	21	2	..	128
2.50-2.99	..	..	33	47	134	270	376	28	..	..	98
3.00-3.49	..	..	12	13	28	125	241	30	..	..	64
3.50-3.99	..	..	3	6	8	43	133	30	..	..	31
4.00-4.49	..	..	..	2	2	24	95	64	..	..	105
4.50-4.99	..	..	..	..	..	..	..	..	..	..	..
5.00+	..	..	..	..	..	..	..	..	..	..	..
TOTAL	307	843	1747	1395	1834	2165	1454	210	5	0	58440

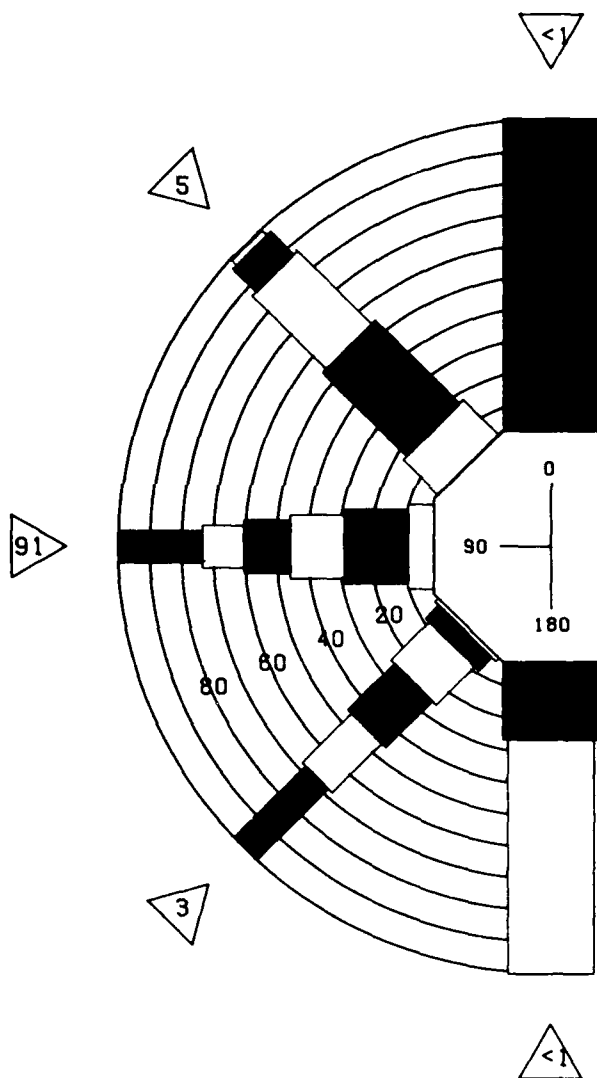
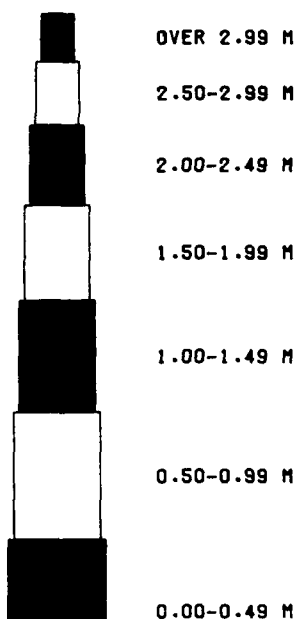
MEAN HS(M) = 2.30 LARGEST HS(M) = 7.00 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440

STATION 10

20 YEARS

SHORELINE ANGLE = 171°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 10 (47.60N/ 124.40W TO 47.48N/ 124.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1995	3.3	3.2	2.8	2.3	1.6	1.4	1.3	1.2	1.6	2.4	3.1	3.5	
1996													
1997													
1998													
1999													
2000													
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LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 10 (47.60N/ 124.40W TO 47.48N/ 124.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1995	3.3	3.2	2.8	2.3	1.6	1.4	1.3	1.2	1.6	2.4	3.1	3.5	
1996													
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2049													
2050													
2051													
2052													
2053													
2054													
2055													
2056													
2057													
2058													
2059													
2060													
2061													
2062													
2063													
2064													
2065													
2066													
2067													
2068													
2069													
2070													
2071													
2072													
2073													
2074													
2075													

20 YR. ST.ISTICS FOR PACIFIC STATION 10 (47.60N/ 124.40W TO 47.48N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	90-100
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	1.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	1.9
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	63102409
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		

HEIGHT (METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD (SECONDS)					TOTAL	
	4.4-	6.1-	8.1-	9.6-	10.6-	11.9-	13.4-	15.4-	18.2-	21.3-	
0.000	0.49										0
0.500	0.99										0
1.000	1.49										0
1.500	1.99										0
2.000	2.49										0
2.500	2.99										0
3.000	3.49										0
3.500	3.99										0
4.000	4.49										0
4.500	4.99										0
5.000											0
TOTAL	0	0	0	0	0	0	0	0	0	0	
MEAN HS (M) = 0.	LARGEST HS (M) = 0.				MEAN TP (SEC) = 0.				NUMBER OF CASES = 0		

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0	0	0	0	0	0	0	0	0	0	0	0
0.5	17	1	0	0	0	0	0	0	0	0	17
1.0	160	21	0	0	0	0	0	0	0	0	161
1.5	88	22	0	0	0	0	0	0	0	0	110
2.0	1	6	0	0	0	0	0	0	0	0	7
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	266	29	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 1.45	LARGEST HS(M) = 2.48				MEAN TP(SEC) = 5.4		NUMBER OF CASES =		175		

HEIGHT(METERS)	PERIOD(SECONDS)					TOTAL					
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	67
0.1	0	0	0	0	0	0	0	0	0	0	350
0.2	0	0	0	0	0	0	0	0	0	0	7068
0.3	0	0	0	0	0	0	0	0	0	0	5262
0.4	0	0	0	0	0	0	0	0	0	0	61
0.5	0	0	0	0	0	0	0	0	0	0	1455
0.6	0	0	0	0	0	0	0	0	0	0	704
0.7	0	0	0	0	0	0	0	0	0	0	283
0.8	0	0	0	0	0	0	0	0	0	0	145
0.9	0	0	0	0	0	0	0	0	0	0	30
TOTAL	2563	5509	5363	2703	3077	1679	1	0	0	0	
MEAN HS(M) = 1.65	LARGEST HS(M) = 4.93		MEAN TP(SEC) = 8.7		NUMBER OF CASES = 12224						

[illegible]

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00 - 0.49										0	
0.50 - 0.99										0	
1.00 - 1.49										0	
1.50 - 1.99										0	
2.00 - 2.49										0	
2.50 - 2.99										0	
3.00 - 3.49										0	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	166	977	1354	900	1410	822	204	16	0	3434	

MEAN HS(M) = 2.85 LARGEST HS(M) = 6.53 MEAN TP(SEC) = 9.9 NUMBER OF CASES = 3434

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00 - 0.49										0	
0.50 - 0.99										0	
1.00 - 1.49										0	
1.50 - 1.99										0	
2.00 - 2.49										0	
2.50 - 2.99										0	
3.00 - 3.49										0	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	44	74	7	0	0	0	0	0	0	77	

MEAN HS(M) = 1.67 LARGEST HS(M) = 3.51 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 77

PHASE 3 ST. 11 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00 - 0.49										0	
0.50 - 0.99										0	
1.00 - 1.49										0	
1.50 - 1.99										0	
2.00 - 2.49										0	
2.50 - 2.99										0	
3.00 - 3.49										0	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 11 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 47.48N/124.35W LAT. LON. END= 47.35N/124.33W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	1100	2177	3955	1111	2222	2222	917	1111	1111	1111	1111	1717
0.50-0.99	1333	1502	3222	2111	2222	2222	2222	2222	2222	2222	2222	2222
1.00-1.49	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
1.50-1.99	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
2.00-2.49	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
2.50-2.99	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
3.00-3.49	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
3.50-3.99	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
4.00-4.49	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
4.50-4.99	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111	1111
TOTAL	316	846	1741	1391	1831	2164	1453	210	5	0		58440

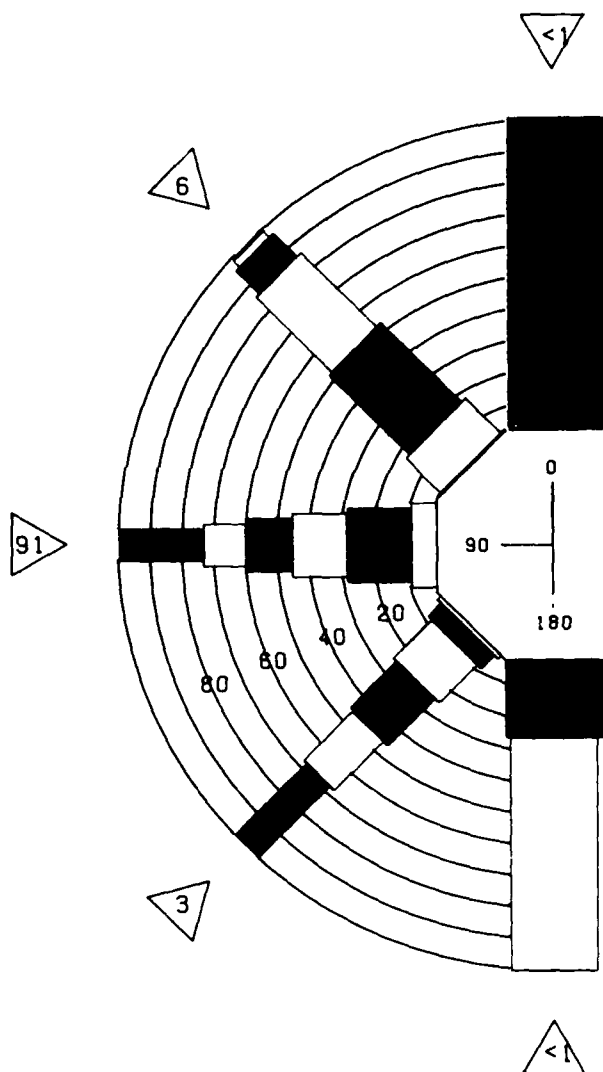
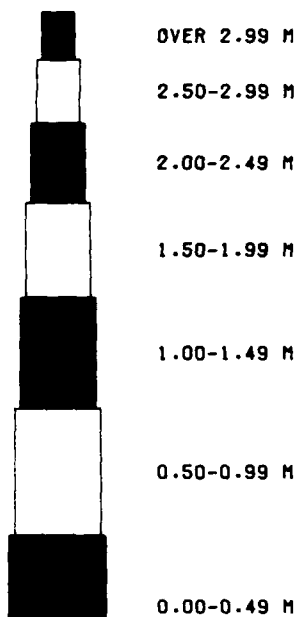
MEAN HS(M) = 2.30 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440

STATION 11

20 YEARS

SHORELINE ANGLE = 171°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 11 (47.48N/ 124.35W TO 47.35N/ 124.33W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1957	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1958	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1959	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1960	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1961	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1962	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1964	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1972	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1973	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1975	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.4	3.1	3.5	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 11 (47.48N/ 124.35W TO 47.35N/ 124.33W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1957	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1958	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1959	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1960	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1961	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1962	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1964	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1972	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1973	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1975	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

20 YR. STATISTICS FOR PACIFIC STATION 11 (47.48N/ 124.35W TO 47.35N/ 124.33W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	79.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											17
0.50 - 0.99											389
1.00 - 1.49	352	37									1282
1.50 - 1.99	1045	237									564
2.00 - 2.49	369	195									18
2.50 - 2.99		18									0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	1783	487	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1329

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											289
0.50 - 0.99											10254
1.00 - 1.49	333	2671	4948	1697	422	159	22				132515
1.50 - 1.99	3302	2440	7409	4726	3235	1338	124				13636
2.00 - 2.49	326	790	1851	3482	2029	2639	514				10137
2.50 - 2.99	54	484	936	1043	1929	2810	1062				4814
3.00 - 3.49		147	147	308	1624	3244	1338				2697
3.50 - 3.99		22	10	95	205	3235	1261				1283
4.00 - 4.49					37	463	1050				674
4.50 - 4.99					1	73	330				264
5.00 +						29	165				
TOTAL	1039	6661	14886	11366	13773	15680	6552	721	1	0	

MEAN HS(M) = 1.89 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 41323

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											16
0.50 - 0.99											559
1.00 - 1.49											2019
1.50 - 1.99	109	224	537	523	381	188	68	54	15		2752
2.00 - 2.49	54	302	436	362	578	576	304	70	15		3852
2.50 - 2.99		364	371	335	440	1134	763	66	28		3870
3.00 - 3.49		189	340	335	561	1161	1177	85	22		3569
3.50 - 3.99		88	268	265	521	841	1416	169	1		2977
4.00 - 4.49		13	177	112	427	556	1569	123			1632
4.50 - 4.99			66	82	225	248	1096	160	5		1176
5.00 +			17	34	123	212	580	210			
TOTAL	202	1345	2465	2166	3637	5185	7433	1313	81	0	1155

MEAN HS(M) = 2.93 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 13948

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	8	20	6	1	1	1	1	1	1	1	0
0.50-1.49	116	213	159	111	104	124	114	114	114	114	200
1.50-2.49	20	100	111	119	134	114	114	114	114	114	600
2.50-3.49	1	11	11	102	114	20	20	20	20	20	400
3.50-4.49	1	1	1	10	18	18	18	18	18	18	100
4.50-5.00	1	1	1	1	1	1	1	1	1	1	40
TOTAL	170	946	742	493	582	138	13	0	0	0	1819

MEAN HS(M) = 2.90 LARGEST HS(M) = 6.40 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 1819

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	8	1	1	1	1	1	1	1	1	1	0
0.50-1.49	13	6	1	1	1	1	1	1	1	1	13
1.50-2.49	3	3	1	1	1	1	1	1	1	1	3
2.50-3.49	1	1	1	1	1	1	1	1	1	1	0
3.50-4.49	1	1	1	1	1	1	1	1	1	1	0
4.50-5.00	1	1	1	1	1	1	1	1	1	1	0
TOTAL	24	9	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 21

PHASE 3 ST. 12 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.35N/124.33W LAT. LON. END= 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

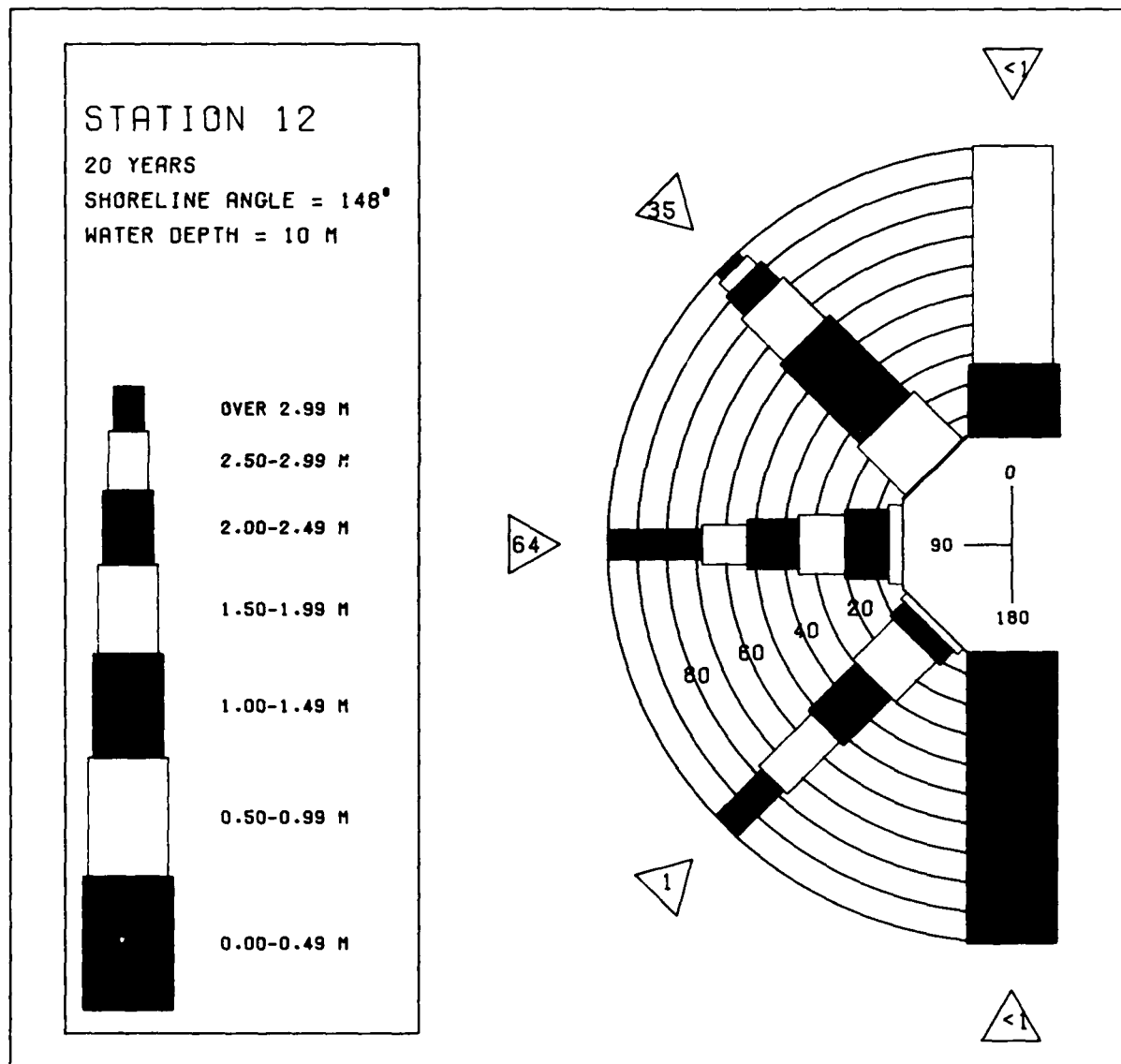
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	0
0.50-1.49	1	1	1	1	1	1	1	1	1	1	0
1.50-2.49	1	1	1	1	1	1	1	1	1	1	0
2.50-3.49	1	1	1	1	1	1	1	1	1	1	0
3.50-4.49	1	1	1	1	1	1	1	1	1	1	0
4.50-5.00	1	1	1	1	1	1	1	1	1	1	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 12 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 47.35N/124.33W LAT. LONG. END = 47.30N/124.28W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.6	11.7-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.49	71	289	520	178	44	17	2	1	1	1	11
0.50	141	209	520	524	361	152	7	1	1	1	11
0.51	92	150	234	385	460	321	1	1	1	1	11
0.52	10	113	91	146	401	294	1	1	1	1	11
0.53	..	60	67	78	263	440	1	1	1	1	11
0.54	..	21	50	48	127	349	1	1	1	1	11
0.55	..	..	30	13	37	186	1	1	1	1	11
0.56	..	..	8	1	17	32	1	1	1	1	11
0.57	..	..	1	..	3	30	1	1	1	1	11
0.58	..	..	..	..	8	8	1	1	1	1	11
0.59	..	..	..	..	..	..	1	1	1	1	11
0.60	..	..	..	..	..	..	1	1	1	1	11
TOTAL	320	942	1806	1399	1796	2097	1394	200	5	0	58440

MEAN HS(M) = 2.16 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
 HIS STATION 12 (47.35N/ 124.33W TO 47.30N/ 124.28W)
 MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	3.2	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR
 HIS STATION 12 (47.35N/ 124.33W TO 47.30N/ 124.28W)
 MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

20 YR. STATISTICS FOR PACIFIC STATION 12 (47.35N/ 124.33W TO 47.30N/ 124.28W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	16.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	22.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63122215

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
LAT. LONG. START = 47.33N/124.28W LAT. LONG. END = 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
LAT. LONG. START= 47.30N/124.22W LAT. LONG. END= 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	1	1	.	.	.	.	.	.	.	.	17
0.1	-	1	1	.	.	.	.	.	.	.	.	389
0.2	-	1	1	.	.	.	.	.	.	.	.	1282
0.3	-	1	1	.	.	.	.	.	.	.	.	564
0.4	-	1	1	.	.	.	.	.	.	.	.	18
0.5	-	1	1	.	.	.	.	.	.	.	.	0
0.6	-	1	1	.	.	.	.	.	.	.	.	0
0.7	-	1	1	.	.	.	.	.	.	.	.	0
0.8	-	1	1	.	.	.	.	.	.	.	.	0
0.9	-	1	1	.	.	.	.	.	.	.	.	0
1.0	-	1	1	.	.	.	.	.	.	.	.	0
1.1	-	1	1	.	.	.	.	.	.	.	.	0
1.2	-	1	1	.	.	.	.	.	.	.	.	0
1.3	-	1	1	.	.	.	.	.	.	.	.	0
1.4	-	1	1	.	.	.	.	.	.	.	.	0
1.5	-	1	1	.	.	.	.	.	.	.	.	0
1.6	-	1	1	.	.	.	.	.	.	.	.	0
1.7	-	1	1	.	.	.	.	.	.	.	.	0
1.8	-	1	1	.	.	.	.	.	.	.	.	0
1.9	-	1	1	.	.	.	.	.	.	.	.	0
2.0	-	1	1	.	.	.	.	.	.	.	.	0
2.1	-	1	1	.	.	.	.	.	.	.	.	0
2.2	-	1	1	.	.	.	.	.	.	.	.	0
2.3	-	1	1	.	.	.	.	.	.	.	.	0
2.4	-	1	1	.	.	.	.	.	.	.	.	0
2.5	-	1	1	.	.	.	.	.	.	.	.	0
2.6	-	1	1	.	.	.	.	.	.	.	.	0
2.7	-	1	1	.	.	.	.	.	.	.	.	0
2.8	-	1	1	.	.	.	.	.	.	.	.	0
2.9	-	1	1	.	.	.	.	.	.	.	.	0
3.0	-	1	1	.	.	.	.	.	.	.	.	0
3.1	-	1	1	.	.	.	.	.	.	.	.	0
3.2	-	1	1	.	.	.	.	.	.	.	.	0
3.3	-	1	1	.	.	.	.	.	.	.	.	0
3.4	-	1	1	.	.	.	.	.	.	.	.	0
3.5	-	1	1	.	.	.	.	.	.	.	.	0
3.6	-	1	1	.	.	.	.	.	.	.	.	0
3.7	-	1	1	.	.	.	.	.	.	.	.	0
3.8	-	1	1	.	.	.	.	.	.	.	.	0
3.9	-	1	1	.	.	.	.	.	.	.	.	0
4.0	-	1	1	.	.	.	.	.	.	.	.	0
4.1	-	1	1	.	.	.	.	.	.	.	.	0
4.2	-	1	1	.	.	.	.	.	.	.	.	0
4.3	-	1	1	.	.	.	.	.	.	.	.	0
4.4	-	1	1	.	.	.	.	.	.	.	.	0
4.5	-	1	1	.	.	.	.	.	.	.	.	0
4.6	-	1	1	.	.	.	.	.	.	.	.	0
4.7	-	1	1	.	.	.	.	.	.	.	.	0
4.8	-	1	1	.	.	.	.	.	.	.	.	0
4.9	-	1	1	.	.	.	.	.	.	.	.	0
TOTAL		1783	487	0	0	0	0	0	0	0	0	
MEAN HS(M) = 1.30		LARGEST HS(M) = 2.36		MEAN TP(SEC) = 5.6		NUMBER OF CASES = 1329						

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1329

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
LAT. LONG. START = 47.30N/124.26W LAT. LONG. END = 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
00												

MEAN HS(M) = 1.89 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 41323

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
LAT. / LONG. START = 47.30N/124.28W LAT. / LONG. END = 47.23N/124.23W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

MEAN HS(M) = 2.93 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 13948

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	208	20	.	.	.	.	.	.	.	.	208
1.00 - 1.49	126	271	56	11	1	.	.	.	.	.	400
1.50 - 1.99	20	266	171	168	20	.	.	.	.	.	545
2.00 - 2.49	1	102	186	139	104	1	.	.	.	.	394
2.50 - 2.99	.	11	116	102	150	114	.	.	.	.	337
3.00 - 3.49	.	.	17	46	49	32	6	.	.	.	135
3.50 - 3.99	.	.	1	10	20	18	0	.	.	.	69
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 - 5.49	.	.	.	.	.	.	.	.	.	.	0
5.50 - 5.99	.	.	.	.	.	.	.	.	.	.	0
6.00 - 6.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	170	946	742	493	582	138	13	0	0	0	1819

MEAN HS(M) = 2.90 LARGEST HS(M) = 6.40 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 1819

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	8	.	.	.	.	.	.	.	.	.	8
1.00 - 1.49	13	.	.	.	.	.	.	.	.	.	13
1.50 - 1.99	3	6	.	.	.	.	.	.	.	.	9
2.00 - 2.49	.	3	.	.	.	.	.	.	.	.	3
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 - 5.49	.	.	.	.	.	.	.	.	.	.	0
5.50 - 5.99	.	.	.	.	.	.	.	.	.	.	0
6.00 - 6.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	24	9	0	0	0	0	0	0	0	0	21

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 21

PHASE 3 ST. 13 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.30N/124.28W LAT. LON. END= 47.23N/124.23W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

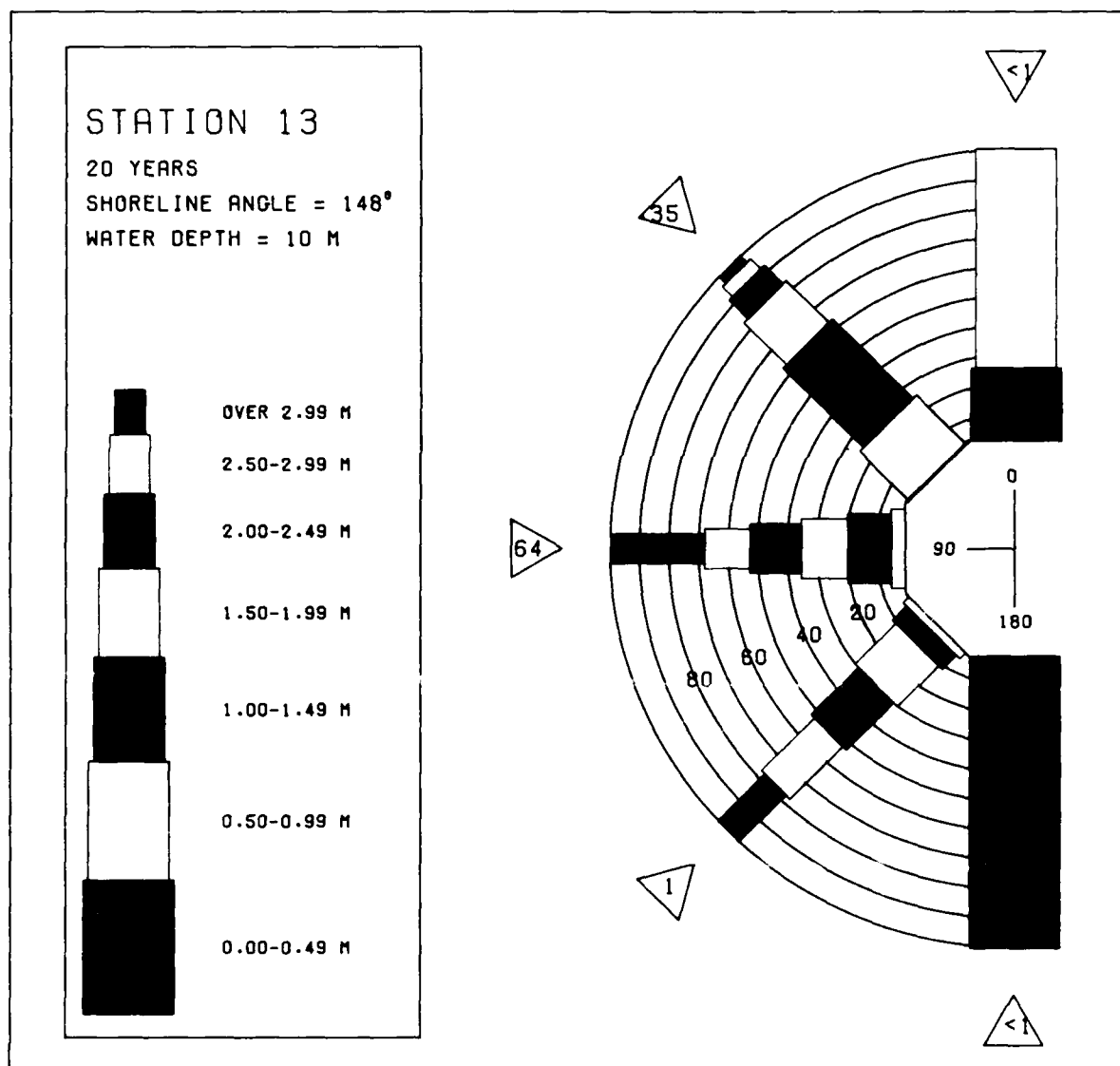
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 - 5.49	0
5.50 - 5.99	0
6.00 - 6.49	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 13 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 47.30N/124.28W LAT. LONG. END= 47.23N/124.23W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.00 - 0.49	6.0	6.0	9.5	10.5	10.6	11.8	13.4	15.4	18.2	22.3	29
0.50 - 0.99	71	280	520	178	44	17	1	1	1	1	1121
1.00 - 1.49	141	290	520	178	361	152	2	7	1	1	2260
1.50 - 1.99	92	150	234	524	460	321	81	8	1	1	1732
2.00 - 2.49	10	113	91	146	401	294	182	12	1	1	1449
2.50 - 2.99	..	60	67	78	263	440	257	16	2	1	1177
3.00 - 3.49	..	2	50	48	127	349	267	30	..	..	892
3.50 - 3.99	..	..	30	22	78	186	175	26	..	..	605
4.00 - 4.49	..	..	8	13	17	17	17	28	..	..	337
4.50 - 4.99	..	..	1	4	17	17	17	28	..	..	173
5.00 +	..	..	..	1	8	30	30	44	..	..	145
TOTAL	320	942	1806	1399	1796	2097	1394	200	5	0	

MEAN HS(M) = 2.16 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 10.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 13 (47.30N/ 124.28W TO 47.23N/ 124.23W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1957	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1958	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1959	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1960	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1961	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1962	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1963	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1964	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1965	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1966	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1967	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1968	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1969	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1970	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1971	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1972	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1973	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1974	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2
1975	2.9	3.0	2.6	2.1	1.5	1.3	1.1	1.1	1.4	2.2	2.9	3.4	2.2

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 13 (47.30N/ 124.28W TO 47.23N/ 124.23W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1957	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1958	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1959	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1960	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1961	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1962	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1963	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1964	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1965	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1966	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1967	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1968	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1969	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1970	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1971	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1972	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1973	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1974	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1975	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

20 YR. STATISTICS FOR PACIFIC STATION 13 (47.30N/ 124.28W TO 47.23N/ 124.23W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.2
MEAN PEAK WAVE PERIOD	(SECONDS)	8.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	000-030
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	1.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	8.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	000
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63122215

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
10.0-10.49	0
10.5-10.99	0
11.0-11.49	0
11.5-11.99	0
12.0-12.49	0
12.5-12.99	0
13.0-13.49	0
13.5-13.99	0
14.0-14.49	0
14.5-14.99	0
15.0-15.49	0
15.5-15.99	0
16.0-16.49	0
16.5-16.99	0
17.0-17.49	0
17.5-17.99	0
18.0-18.49	0
18.5-18.99	0
19.0-19.49	0
19.5-19.99	0
20.0-20.49	0
20.5-20.99	0
21.0-21.49	0
21.5-21.99	0
22.0-22.49	0
22.5-22.99	0
23.0-23.49	0
23.5-23.99	0
24.0-24.49	0
24.5-24.99	0
25.0-25.49	0
25.5-25.99	0
26.0-26.49	0
26.5-26.99	0
27.0-27.49	0
27.5-27.99	0
28.0-28.49	0
28.5-28.99	0
29.0-29.49	0
29.5-29.99	0
30.0-30.49	0
30.5-30.99	0
31.0-31.49	0
31.5-31.99	0
32.0-32.49	0
32.5-32.99	0
33.0-33.49	0
33.5-33.99	0
34.0-34.49	0
34.5-34.99	0
35.0-35.49	0
35.5-35.99	0
36.0-36.49	0
36.5-36.99	0
37.0-37.49	0
37.5-37.99	0
38.0-38.49	0
38.5-38.99	0
39.0-39.49	0
39.5-39.99	0
40.0-40.49	0
40.5-40.99	0
41.0-41.49	0
41.5-41.99	0
42.0-42.49	0
42.5-42.99	0
43.0-43.49	0
43.5-43.99	0
44.0-44.49	0
44.5-44.99	0
45.0-45.49	0
45.5-45.99	0
46.0-46.49	0
46.5-46.99	0
47.0-47.49	0
47.5-47.99	0
48.0-48.49	0
48.5-48.99	0
49.0-49.49	0
49.5-49.99	0
50.0-50.49	0
50.5-50.99	0
51.0-51.49	0
51.5-51.99	0
52.0-52.49	0
52.5-52.99	0
53.0-53.49	0
53.5-53.99	0
54.0-54.49	0
54.5-54.99	0
55.0-55.49	0
55.5-55.99	0
56.0-56.49	0
56.5-56.99	0
57.0-57.49	0
57.5-57.99	0
58.0-58.49	0
58.5-58.99	0
59.0-59.49	0
59.5-59.99	0
60.0-60.49	0
60.5-60.99	0
61.0-61.49	0
61.5-61.99	0
62.0-62.49	0
62.5-62.99	0
63.0-63.49	0
63.5-63.99	0
64.0-64.49	0
64.5-64.99	0
65.0-65.49	0
65.5-65.99	0
66.0-66.49	0
66.5-66.99	0
67.0-67.49	0
67.5-67.99	0
68.0-68.49	0
68.5-68.99	0
69.0-69.49	0
69.5-69.99	0
70.0-70.49	0
70.5-70.99	0
71.0-71.49	0
71.5-71.99	0
72.0-72.49	0
72.5-72.99	0
73.0-73.49	0
73.5-73.99	0
74.0-74.49	0
74.5-74.99	0
75.0-75.49	0
75.5-75.99	0
76.0-76.49	0
76.5-76.99	0
77.0-77.49	0
77.5-77.99	0
78.0-78.49	0
78.5-78.99	0
79.0-79.49	0
79.5-79.99	0
80.0-80.49	0
80.5-80.99	0
81.0-81.49	0
81.5-81.99	0
82.0-82.49	0
82.5-82.99	0
83.0-83.49	0
83.5-83.99	0
84.0-84.49	0
84.5-84.99	0
85.0-85.49	0
85.5-85.99	0
86.0-86.49	0
86.5-86.99	0
87.0-87.49	0
87.5-87.99	0
88.0-88.49	0
88.5-88.99	0
89.0-89.49	0
89.5-89.99	0
90.0-90.49</						

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 47.23N/124.23W LAT. LONG. END= 47.13N/124.00W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	57	530	723	471	944	558	134	1	0	0	0	2012

MEAN HS(M) = 3.25 LARGEST HS(M) = 7.30 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2012

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 47.23N/124.23W LAT. LONG. END= 47.13N/124.00W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	1	5	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	8	10	.	.	.	.	.	.	.	.	.	18
1.50 - 1.99	8	17	.	.	.	.	.	.	.	.	.	25
2.00 - 2.49	.	6	5	.	.	.	.	.	.	.	.	11
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	17	39	5	0	0	0	0	0	0	0	0	38

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.34 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 38

PHASE 3 ST. 14 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 47.23N/124.23W LAT. LONG. END= 47.13N/124.00W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

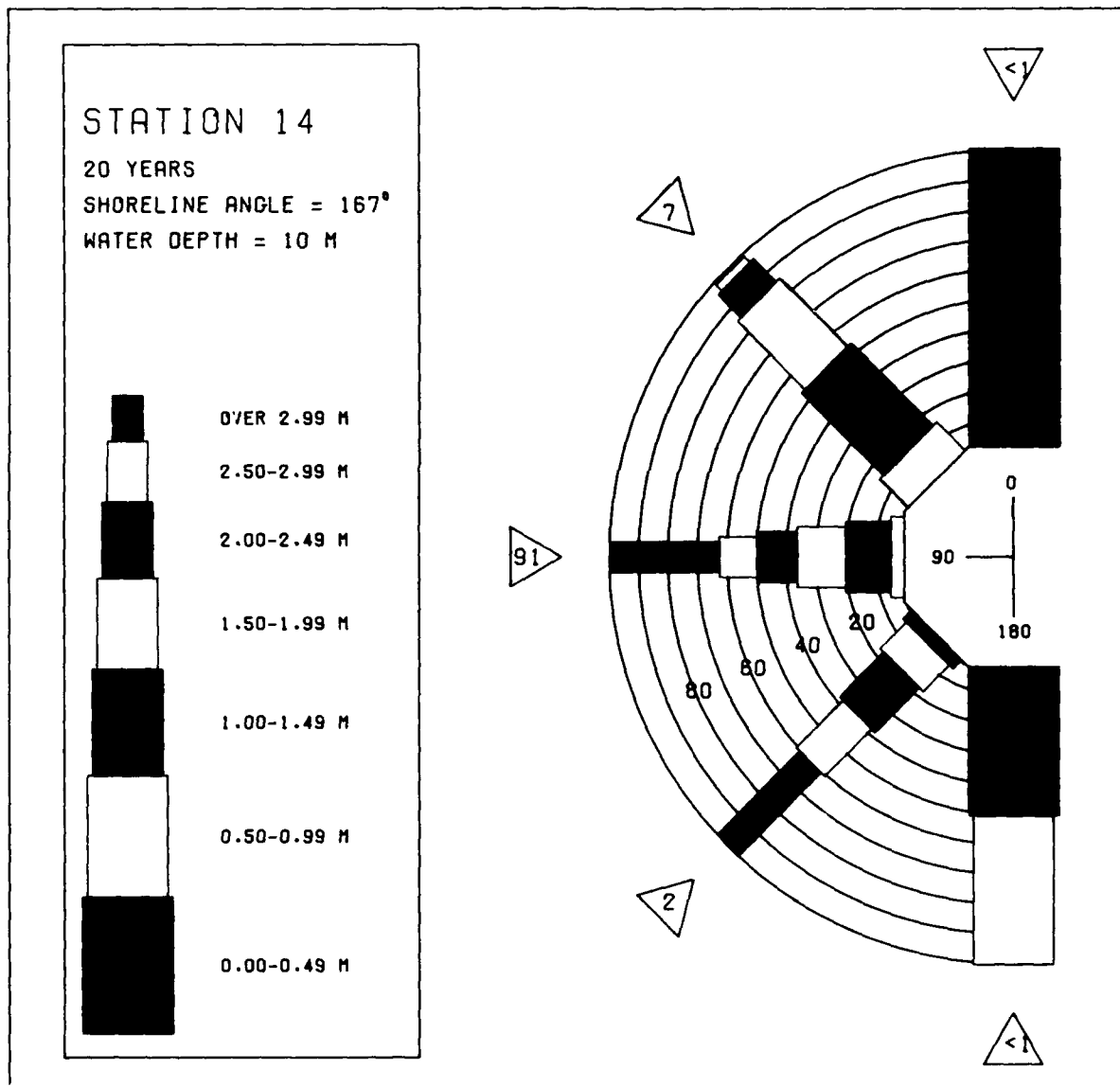
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 14 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 47.23N/124.23W LAT. LON. END= 47.13N/124.00W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	41	183	218	48	10	4	3	1	..	..	3
0.50-0.99	104	331	704	349	140	40	8	3	..	..	507
1.00-1.49	117	329	433	449	328	164	2	..	..	..	1678
1.50-1.99	113	141	141	282	424	283	59	7	..	..	1747
2.00-2.49	..	10	55	124	252	334	77	..	..	..	1350
2.50-2.99	..	..	26	63	140	455	105	1	..	..	1217
3.00-3.49	..	..	8	15	30	270	337	..	..	..	1035
3.50-3.99	..	..	1	6	12	116	332	..	..	..	881
4.00-4.49	..	..	..	..	..	63	99	..	..	..	399
4.50-4.99	..	..	..	..	..	..	..	..	..	..	494
5.00+	..	..	..	..	..	..	..	..	..	..	..
TOTAL	276	943	1661	1373	1809	2217	1467	211	3	0	58440

MEAN HS(M) = 2.62 LARGEST HS(M) = 7.30 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440



PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LONG. START= 47.13N/124.20W LAT. LONG. END= 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 47.13N/124.20W LAT. LONG. END= 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	173	30	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.44 LARGEST HS(M) = 1.97 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 120

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 47.13N/124.20W LAT. LONG. END= 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	10	.	.	.	.	.	.	.	.	.	10
0.50 - 0.99	306	747	626	106	28	6	1	.	.	.	1817
1.00 - 1.49	785	1632	1724	489	163	13	.	.	.	.	4816
1.50 - 1.99	1059	1187	1202	811	513	78	.	.	.	.	4850
2.00 - 2.49	124	773	213	475	746	282	.	.	.	.	2613
2.50 - 2.99	.	215	121	188	446	268	.	.	.	.	1258
3.00 - 3.49	.	41	71	32	258	155	1	.	.	.	558
3.50 - 3.99	.	.	25	23	258	71	.	.	.	.	197
4.00 - 4.49	.	.	1	11	10	51	.	.	.	.	73
4.50 - 4.99	.	.	.	.	.	37	.	.	.	.	37
5.00 +	.	.	.	.	.	1	.	.	.	.	1
TOTAL	2284	4595	3983	2135	2269	962	2	0	0	0	9500

MEAN HS(M) = 1.74 LARGEST HS(M) = 5.01 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 9500

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 47.13N/124.20W LAT. LONG. END= 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	8	6	8	.	.	.	.	.	.	.	37
0.50 - 0.99	88	995	1475	326	68	37	25	.	.	.	3015
1.00 - 1.49	71	1543	5041	2828	1083	367	78	11	.	.	11022
1.50 - 1.99	87	823	3175	3607	2753	1442	235	47	.	.	12576
2.00 - 2.49	13	446	1038	2457	3396	2577	552	80	.	.	10564
2.50 - 2.99	.	176	426	936	3601	3749	1221	73	22	.	8204
3.00 - 3.49	.	37	268	492	2135	4483	1839	100	58	.	9362
3.50 - 3.99	.	.	133	261	1100	3752	2683	159	5	.	8993
4.00 - 4.49	.	.	49	97	489	2642	2689	254	.	.	6225
4.50 - 4.99	.	.	10	30	184	1093	2258	266	.	.	3841
5.00 +	.	.	.	.	77	564	3030	1165	.	.	4842
TOTAL	267	4026	11623	11040	14886	20706	14611	2171	51	0	46414

MEAN HS(M) = 2.80 LARGEST HS(M) = 7.36 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 46414

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	5	11	6	30	11	1	1	1	1	1	9
0.5-0.99	15	8	11	6	75	11	1	1	1	1	1	21
1.0-1.49	139	108	123	109	246	71	1	1	1	1	1	661
1.5-1.99	22	201	181	157	246	90	1	1	1	1	1	607
2.0-2.49	1	22	217	140	183	164	30	1	1	1	1	607
2.5-2.99	1	1	77	77	157	165	30	1	1	1	1	607
3.0-3.49	1	1	22	18	47	80	83	1	1	1	1	607
3.5-3.99	1	1	1	1	1	1	1	1	1	1	1	607
4.0-4.49	1	1	1	1	1	1	1	1	1	1	1	607
4.5-4.99	1	1	1	1	1	1	1	1	1	1	1	607
5.0+	1	1	1	1	1	1	1	1	1	1	1	607
TOTAL	78	603	874	573	1045	661	181	11	0	0	0	2368

MEAN HS(M) = 3.09 LARGEST HS(M) = 7.12 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2368

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	1	1
0.5-0.99	1	1	1	1	1	1	1	1	1	1	1	1
1.0-1.49	3	17	3	1	1	1	1	1	1	1	1	14
1.5-1.99	1	6	8	1	1	1	1	1	1	1	1	14
2.0-2.49	1	1	1	1	1	1	1	1	1	1	1	1
2.5-2.99	1	1	1	1	1	1	1	1	1	1	1	1
3.0-3.49	1	1	1	1	1	1	1	1	1	1	1	1
3.5-3.99	1	1	1	1	1	1	1	1	1	1	1	1
4.0-4.49	1	1	1	1	1	1	1	1	1	1	1	1
4.5-4.99	1	1	1	1	1	1	1	1	1	1	1	1
5.0+	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	10	38	11	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.52 LARGEST HS(M) = 2.26 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 38

PHASE 3 ST. 15 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.13N/124.20W LAT. LON. END= 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

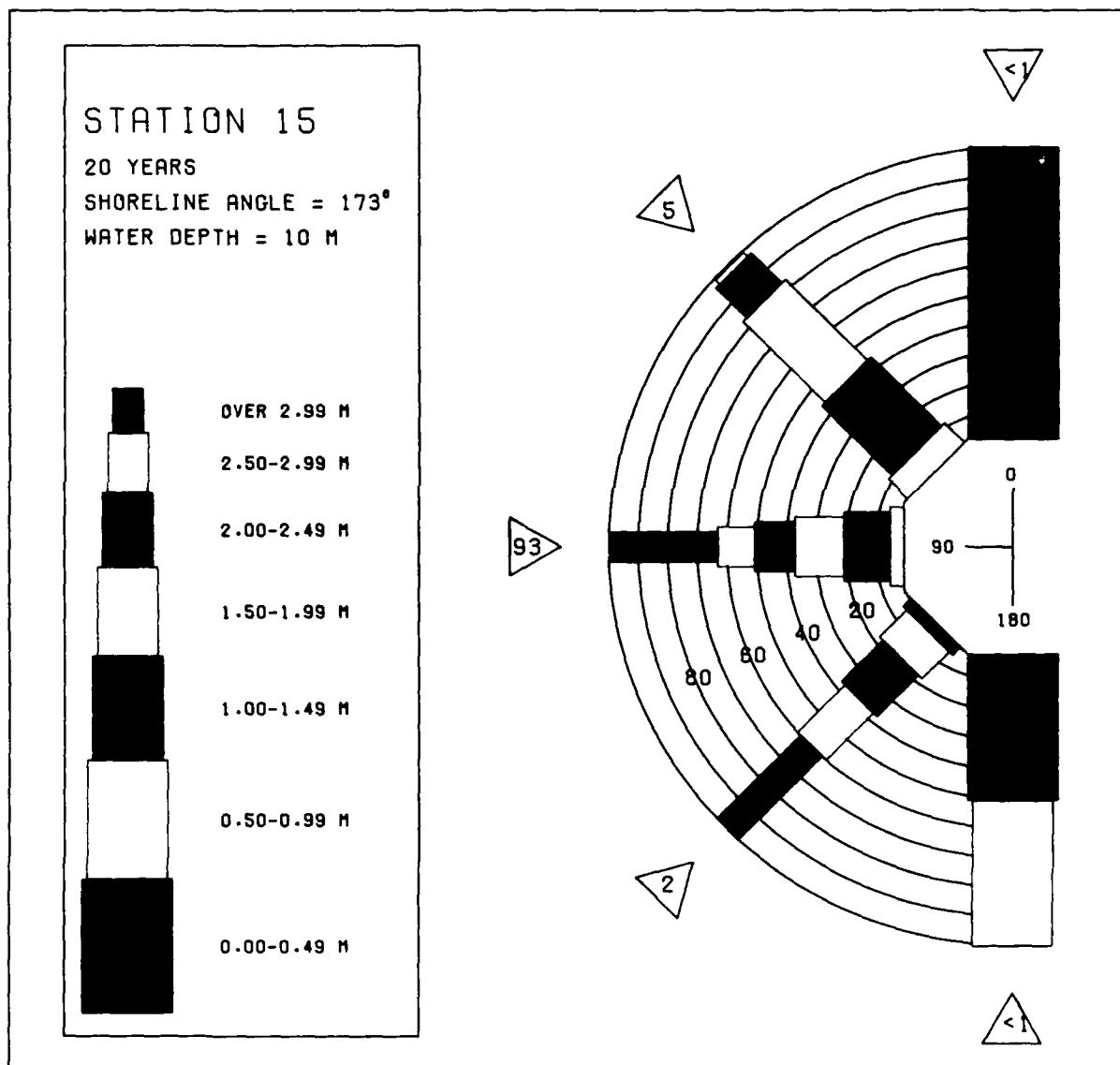
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	1	0
0.5-0.99	1	1	1	1	1	1	1	1	1	1	1	0
1.0-1.49	1	1	1	1	1	1	1	1	1	1	1	0
1.5-1.99	1	1	1	1	1	1	1	1	1	1	1	0
2.0-2.49	1	1	1	1	1	1	1	1	1	1	1	0
2.5-2.99	1	1	1	1	1	1	1	1	1	1	1	0
3.0-3.49	1	1	1	1	1	1	1	1	1	1	1	0
3.5-3.99	1	1	1	1	1	1	1	1	1	1	1	0
4.0-4.49	1	1	1	1	1	1	1	1	1	1	1	0
4.5-4.99	1	1	1	1	1	1	1	1	1	1	1	0
5.0+	1	1	1	1	1	1	1	1	1	1	1	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 15 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 47.13N/124.20W LAT. LONG. END = 47.01N/124.18W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	1	1
0.50-0.99	39	175	210	43	9	4	2	1	1	1	1	48
1.00-1.49	101	327	687	332	127	38	7	1	1	1	1	162
1.50-1.99	123	325	450	44	329	152	23	4	1	1	1	175
2.00-2.49	16	142	144	13	421	237	55	8	1	1	1	183
2.50-2.99	16	48	76	1	429	408	122	7	2	1	1	183
3.00-3.49	10	10	48	1	264	473	164	10	1	1	1	183
3.50-3.99	1	1	23	1	136	398	271	15	1	1	1	183
4.00-4.49	1	1	1	1	64	385	271	25	1	1	1	183
4.50-4.99	1	1	1	1	25	121	228	26	1	1	1	183
5.00+	1	1	1	1	12	64	311	117	1	1	1	183
TOTAL	280	927	1646	1372	1816	2229	1476	214	2	0	0	58440

MEAN HS(M) = 2.64 LARGEST HS(M) = 7.36 MEAN TP(SEC) 11.0 TOTAL CASES = 58440



MONTH

MEAN

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 15 (47.13N/ 124.20W TO 47.01N/ 124.18W)

63102409

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 47.01N/124.18W LAT. LONG. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 47.01N/124.18W LAT. LONG. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	20	.	.	.	.	.	.	.	.	.	20
1.00 - 1.49	140	3	.	.	.	.	.	.	.	.	143
1.50 - 1.99	83	17	.	.	.	.	.	.	.	.	100
2.00 - 2.49	8	10	.	.	.	.	.	.	.	.	18
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	251	30	0	0	0	0	0	0	0	0	281

MEAN HS(M) = 1.47 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 166

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 47.01N/124.18W LAT. LONG. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	29	11	11	.	.	.	.	.	.	.	51
0.50 - 0.99	436	1149	989	155	23	10	.	.	.	.	2782
1.00 - 1.49	905	1995	2433	804	315	34	.	.	.	.	6516
1.50 - 1.99	1069	1117	1158	956	679	100	.	.	.	.	5079
2.00 - 2.49	95	718	244	435	936	207	.	.	.	.	2636
2.50 - 2.99	.	166	136	177	492	177	.	.	.	.	1178
3.00 - 3.49	.	46	75	42	265	82	.	.	.	.	510
3.50 - 3.99	.	5	35	20	80	30	.	.	.	.	170
4.00 - 4.49	.	.	1	13	6	47	.	.	.	.	67
4.50 - 4.99	.	.	.	.	1	6	.	.	.	.	7
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2534	5237	5082	2603	2827	693	0	0	0	0	11105

MEAN HS(M) = 1.63 LARGEST HS(M) = 4.75 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 11105

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 47.01N/124.18W LAT. LONG. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	37	49	23	.	.	.	.	.	.	.	106
0.50 - 0.99	37	773	2587	735	188	71	6	11	.	.	4424
1.00 - 1.49	27	607	15263	3857	2008	785	143	41	.	.	12761
1.50 - 1.99	44	154	1889	3461	3690	2337	467	107	.	.	12160
2.00 - 2.49	17	177	419	1497	4041	3998	1173	82	.	.	11423
2.50 - 2.99	.	73	136	460	2440	5246	2120	145	.	.	10643
3.00 - 3.49	.	22	82	212	1322	4443	2873	201	.	.	9172
3.50 - 3.99	.	.	35	56	450	2575	1432	249	.	.	6550
4.00 - 4.49	.	.	10	20	140	1177	2472	263	.	.	4087
4.50 - 4.99	.	.	.	6	39	350	1632	309	.	.	2332
5.00 +	.	.	.	.	.	.	.	.	.	.	2007
TOTAL	125	1855	10444	10335	14318	21118	15152	2237	84	0	44245

MEAN HS(M) = 2.50 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 44245

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	34	15	11	.	.	.	.	.	.	65
0.50-1.00	18	148	181	225	23	.	.	.	.	.	395
1.01-1.50	63	199	249	124	30	1	.	.	.	.	662
1.51-2.00	10	124	278	171	189	41	.	.	.	.	813
2.01-2.50	.	100	242	201	261	100	10	.	.	.	914
2.51-3.00	.	46	130	159	367	150	18	.	.	.	870
3.01-3.50	.	3	30	30	254	159	46	.	.	.	522
3.51-4.00	.	.	8	25	90	171	44	1	.	.	339
4.01-4.50	.	.	.	8	46	54	35	.	.	.	144
4.51-5.00	.	.	.	1	5	66	71	10	.	.	153
5.00+	97	650	1133	755	1265	742	224	12	0	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.58 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2870

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	2	.	.	.	.	.	.	.	.	.	0
0.50-1.00	13	8	.	.	.	.	.	.	.	.	21
1.01-1.50	20	27	.	.	.	.	.	.	.	.	47
1.51-2.00	.	13	.	.	.	.	.	.	.	.	11
2.01-2.50	.	.	.	.	.	.	.	.	.	.	0
2.51-3.00	.	.	.	.	.	.	.	.	.	.	0
3.01-3.50	.	.	.	.	.	.	.	.	.	.	0
3.51-4.00	.	.	.	.	.	.	.	.	.	.	0
4.01-4.50	.	.	.	.	.	.	.	.	.	.	0
4.51-5.00	.	.	.	.	.	.	.	.	.	.	0
5.00+	39	49	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 2.66 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 54

PHASE 3 ST. 16 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.00	0
1.01-1.50	0
1.51-2.00	0
2.01-2.50	0
2.51-3.00	0
3.01-3.50	0
3.51-4.00	0
4.01-4.50	0
4.51-5.00	0
5.00+	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 16 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 47.01N/124.18W LAT. LON. END= 46.93N/124.18W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00-0.49	3	6	3	2	21	8	2	1	1	1	1	14
0.50-0.99	50	195	359	90	237	81	14	4	4	1	1	725
1.00-1.49	110	276	787	471	440	424	46	10	1	1	1	1803
1.50-1.99	128	151	329	454	516	424	117	18	1	1	1	1497
2.00-2.49	13	104	94	210	319	552	213	14	2	1	1	1052
2.50-2.99	1	37	51	84	195	467	289	20	1	1	1	720
3.00-3.49	1	11	28	41	78	276	322	24	1	1	1	465
3.50-3.99	1	1	1	1	23	139	351	26	1	1	1	247
4.00-4.49	1	1	1	1	8	41	166	31	1	1	1	214
4.50-4.99	1	1	1	1	1	19	112	83	1	1	1	214
5.00+	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	304	780	1663	1366	1837	2252	1532	221	5	0	0	58440

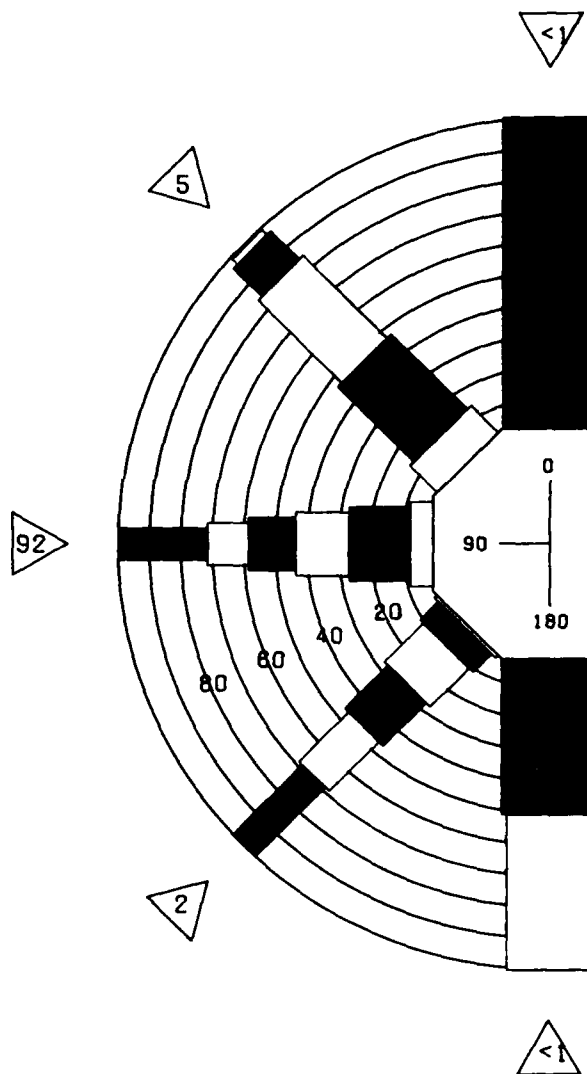
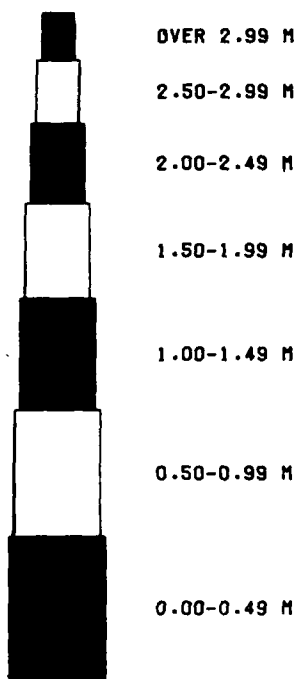
MEAN HS(M) = 2.35 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440

STATION 16

20 YEARS

SHORELINE ANGLE = 174°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 16 (47.01N/ 124.18W TO 46.93N/ 124.18W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 16 (47.01N/ 124.18W TO 46.93N/ 124.18W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

20 YR. STATISTICS FOR PACIFIC STATION 16 (47.01N/ 124.18W TO 46.93N/ 124.18W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.00
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.00
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	5.5
LARGEST WAVE HS	(METERS)	10.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	62
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		62111915

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 14.9
 LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	32	.	.	.	.	.	.	.	.	.	32
1.00 - 1.49	379	11	.	.	.	.	.	.	.	.	390
1.50 - 1.99	227	107	.	.	.	.	.	.	.	.	334
2.00 - 2.49	15	25	.	.	.	.	.	.	.	.	40
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	653	143	0	0	0	0	0	0	0	0	796

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.39 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 468

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	32	37	25	44	61	66	11	.	.	.	95
0.50 - 0.99	448	168	225	441	61	66	11	.	.	.	493
1.00 - 1.49	763	243	452	200	1059	304	22	.	.	.	1113
1.50 - 1.99	872	1081	179	1897	1646	737	187	.	.	.	2644
2.00 - 2.49	56	184	31	285	1266	1254	1500	.	.	.	3691
2.50 - 2.99	.	37	88	77	1078	1634	448	.	.	.	2391
3.00 - 3.49	.	5	22	30	157	1071	436	.	.	.	1379
3.50 - 3.99	.	.	1	11	47	318	269	.	.	.	649
4.00 - 4.49	.	.	.	.	8	58	189	.	.	.	259
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	9
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2171	6180	9237	5680	6692	6173	2052	0	0	0	22332

MEAN HS(M) = 1.87 LARGEST HS(M) = 6.33 MEAN TP(SEC) = 9.8 NUMBER OF CASES = 22332

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	32	13	1	17	8	2	1	.	.	80
0.50 - 0.99	32	354	158	562	171	27	15	6	.	.	2758
1.00 - 1.49	13	212	328	2705	1501	627	140	54	.	.	8632
1.50 - 1.99	54	65	1108	2464	3548	1286	403	95	1	.	6765
2.00 - 2.49	22	189	222	1043	1796	1316	1124	99	23	.	8009
2.50 - 2.99	.	160	340	217	1788	1391	1860	147	13	.	5211
3.00 - 3.49	.	27	109	56	386	1854	2445	310	11	.	2305
3.50 - 3.99	.	.	13	37	112	776	2221	265	5	.	3510
4.00 - 4.49	.	.	.	11	42	251	1288	318	.	.	1910
4.50 - 4.99	.	.	.	3	17	867	775	1	.	.	1633
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	124	1004	6596	7433	10610	15655	13050	2228	84	0	33211

MEAN HS(M) = 2.59 LARGEST HS(M) = 7.10 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 33211

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49											0
0.50-0.99											0
1.00-1.49											0
1.50-1.99											0
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00+											0
TOTAL	85	684	943	608	1029	559	152	0	0	0	2386

MEAN HS(M) = 2.99 LARGEST HS(M) = 6.68 MEAN TP(SEC) = 9.9 NUMBER OF CASES = 2386

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49											0
0.50-0.99											0
1.00-1.49											0
1.50-1.99											0
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00+											0
TOTAL	41	29	0	0	0	0	0	0	0	0	43

MEAN HS(M) = 1.64 LARGEST HS(M) = 2.97 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 43

PHASE 3 ST. 17 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 46.90N/124.15W LAT. LON. END= 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

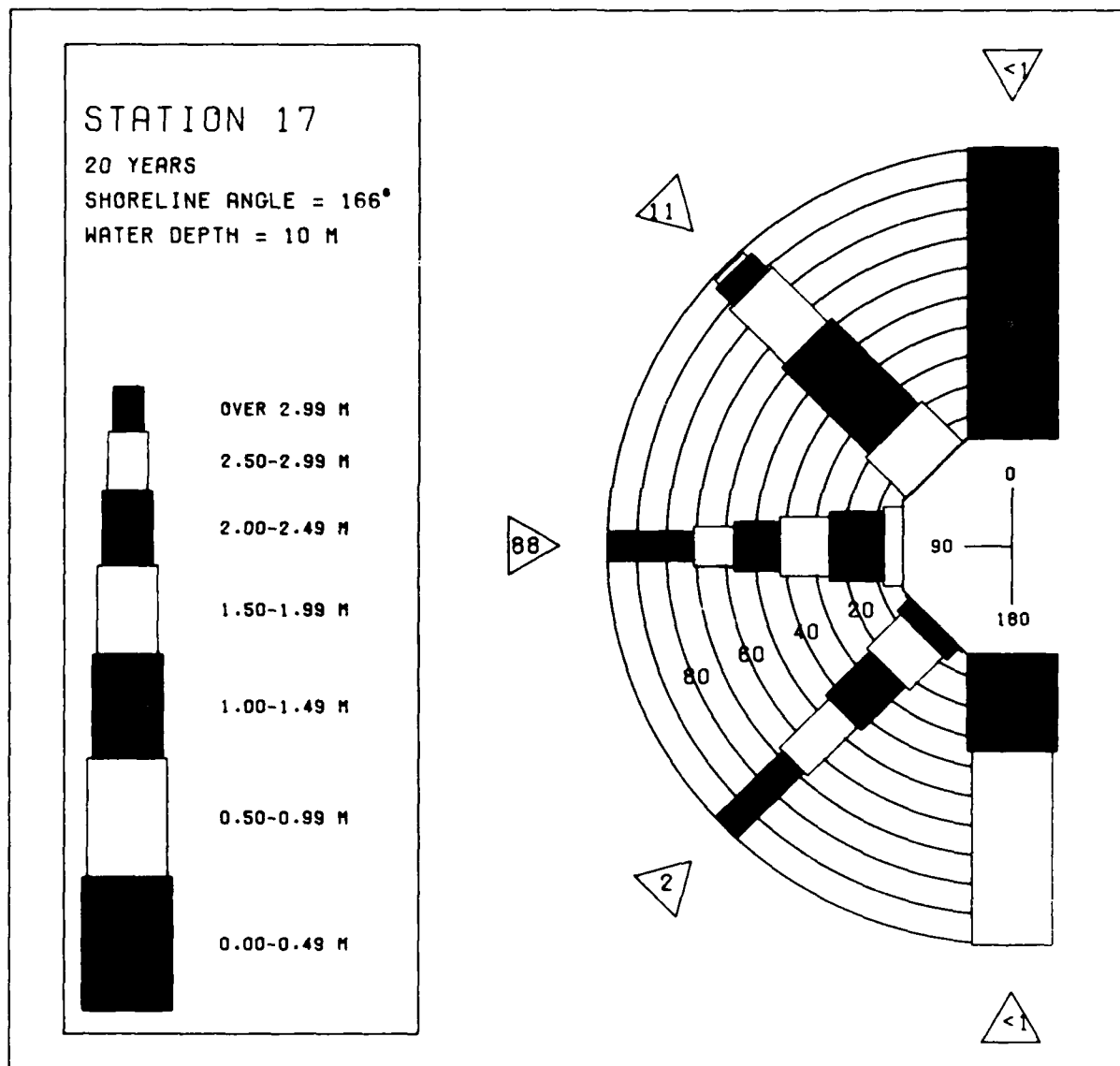
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49											0
0.50-0.99											0
1.00-1.49											0
1.50-1.99											0
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00+											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 17 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 46.98N/124.15W LAT. LONG. END = 46.78N/124.11W
 SHORELINE ANGLE = 166.0 (D.G. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	52	206	383	100	23	9	2	1	..	..	15
0.50-0.99	117	279	790	450	266	93	16	5	..	..	774
1.00-1.49	124	150	304	443	440	252	49	9	..	..	2056
1.50-1.99	10	108	90	188	498	443	127	9	..	..	772
2.00-2.49	..	40	57	81	305	547	221	14	..	..	474
2.50-2.99	..	11	35	45	176	438	390	21	..	..	267
3.00-3.49	..	..	10	13	82	268	312	24	..	..	1017
3.50-3.99	..	..	..	6	30	127	252	31	..	..	710
4.00-4.49	..	..	..	2	9	37	150	77	..	..	444
4.50-4.99	..	..	..	..	1	23	102	..	..	..	229
5.00+	..	..	..	..	..	..	..	..	..	..	203
TOTAL	306	802	1674	1368	1830	2237	1521	217	6	0	

MEAN HS(M) = 2.32 LARGEST HS(M) = 7.10 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 46.78N/124.11W LAT. LONG. END= 46.71N/124.10W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	1	1	1	1	1	1	1	1	1	1	1
0.99	1	1	1	1	1	1	1	1	1	1	1
1.49	1	1	1	1	1	1	1	1	1	1	1
1.99	1	1	1	1	1	1	1	1	1	1	1
2.49	1	1	1	1	1	1	1	1	1	1	1
2.99	1	1	1	1	1	1	1	1	1	1	1
3.49	1	1	1	1	1	1	1	1	1	1	1
3.99	1	1	1	1	1	1	1	1	1	1	1
4.49	1	1	1	1	1	1	1	1	1	1	1
4.99	1	1	1	1	1	1	1	1	1	1	1
5.49	1	1	1	1	1	1	1	1	1	1	1
5.99	1	1	1	1	1	1	1	1	1	1	1
TOTAL	97	650	1129	755	1265	742	224	12	0	0	153

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.58 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 2868

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 46.78N/124.11W LAT. LONG. END= 46.71N/124.10W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	0	0	0	0	0	0	0	0	0	0	0
0.99	0	0	0	0	0	0	0	0	0	0	0
1.49	0	0	0	0	0	0	0	0	0	0	0
1.99	0	0	0	0	0	0	0	0	0	0	0
2.49	0	0	0	0	0	0	0	0	0	0	0
2.99	0	0	0	0	0	0	0	0	0	0	0
3.49	0	0	0	0	0	0	0	0	0	0	0
3.99	0	0	0	0	0	0	0	0	0	0	0
4.49	0	0	0	0	0	0	0	0	0	0	0
4.99	0	0	0	0	0	0	0	0	0	0	0
5.49	0	0	0	0	0	0	0	0	0	0	0
5.99	0	0	0	0	0	0	0	0	0	0	0
TOTAL	39	49	0	0	0	0	0	0	0	0	54

MEAN HS(M) = 1.62 LARGEST HS(M) = 2.66 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 54

PHASE 3 ST. 18 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 46.78N/124.11W LAT. LONG. END= 46.71N/124.10W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	0	0	0	0	0	0	0	0	0	0	0
0.99	0	0	0	0	0	0	0	0	0	0	0
1.49	0	0	0	0	0	0	0	0	0	0	0
1.99	0	0	0	0	0	0	0	0	0	0	0
2.49	0	0	0	0	0	0	0	0	0	0	0
2.99	0	0	0	0	0	0	0	0	0	0	0
3.49	0	0	0	0	0	0	0	0	0	0	0
3.99	0	0	0	0	0	0	0	0	0	0	0
4.49	0	0	0	0	0	0	0	0	0	0	0
4.99	0	0	0	0	0	0	0	0	0	0	0
5.49	0	0	0	0	0	0	0	0	0	0	0
5.99	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 18 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 46.78N/124.11W LAT. LON. END= 46.71N/124.10W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.4	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.00-0.49	14	11	10	10	10	10	10	10	10	10	14
0.50-0.99	139	194	35	44	21	24	12	4	1	1	722
1.00-1.49	139	275	35	44	21	24	12	4	1	1	1975
1.50-1.99	14	150	35	44	21	24	12	4	1	1	1303
2.00-2.49	14	106	35	44	21	24	12	4	1	1	1273
2.50-2.99	14	11	35	44	21	24	12	4	1	1	1053
3.00-3.49	14	11	35	44	21	24	12	4	1	1	721
3.50-3.99	14	11	35	44	21	24	12	4	1	1	447
4.00-4.49	14	11	35	44	21	24	12	4	1	1	247
4.50-4.99	14	11	35	44	21	24	12	4	1	1	214
5.00-5.49	14	11	35	44	21	24	12	4	1	1	214
5.50-5.99	14	11	35	44	21	24	12	4	1	1	214
TOTAL	310	780	1659	1363	1836	2252	1532	221	5	0	58440

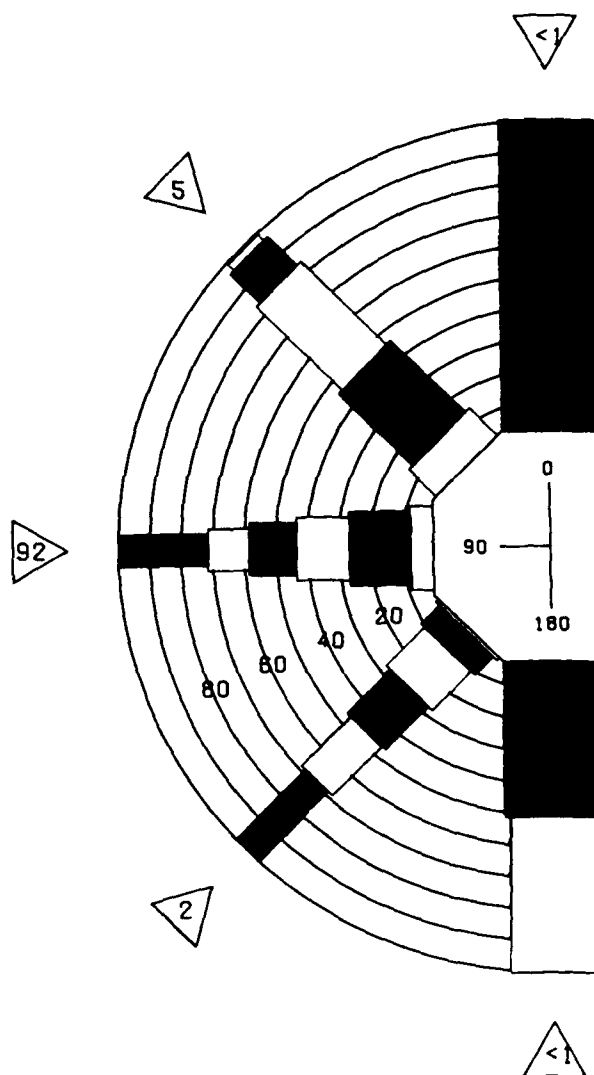
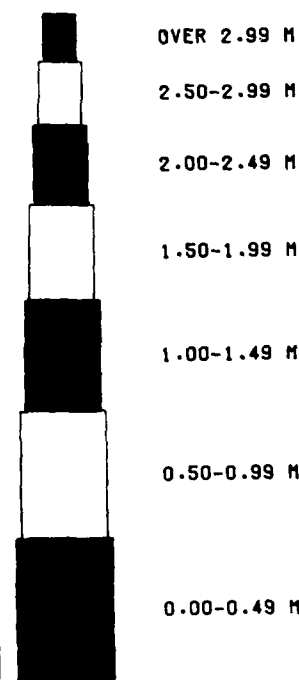
MEAN HS(M) = 2.35 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440

STATION 18

20 YEARS

SHORELINE ANGLE = 174°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 18 (46.78N/ 124.11W TO 46.71N/ 124.10W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1957	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1958	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1959	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1960	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1961	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1962	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1963	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1964	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1965	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1966	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1967	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1968	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1969	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1970	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1971	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1972	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1973	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1974	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1975	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 18 (46.78N/ 124.11W TO 46.71N/ 124.10W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1957	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1958	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1959	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1960	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1961	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1962	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1963	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1964	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1965	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1966	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1967	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1968	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1969	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1970	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1971	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1972	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1973	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1974	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
1975	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5
MEAN	3.3	3.2	2.8	2.3	1.7	1.4	1.3	1.2	1.6	2.5	3.2	3.6	2.5

20 YR. STATISTICS FOR PACIFIC STATION 18 (46.78N/ 124.11W TO 46.71N/ 124.10W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PERIOD	(SECONDS)	11.4
MOST FREQUENT WAVE PERIOD	(SECONDS)	9.0
STANDARD DEVIATION OF WAVE HEIGHT	(METERS)	0.6
STANDARD DEVIATION OF WAVE PERIOD	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	16.5
WAVE ASSOCIATED WITH LARGEST WAVE HS	(DIRECTION)	165
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTION)	62
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		1915

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-5.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	.	.	.	.	.	.	.	.	.	1
1.00-1.49	143	3	.	.	.	.	.	.	.	.	146
1.50-1.99	106	53	.	.	.	.	.	.	.	.	159
2.00-2.49	.	10	.	.	.	.	.	.	.	.	10
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-5.00	.	.	.	.	.	.	.	.	.	.	0
TOTAL	250	66	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.18 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 186

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	13	1	1	.	.	.	.	.	.	.	15
0.50-0.99	256	643	550	68	13	1	.	.	.	.	1531
1.00-1.49	792	1541	1589	287	70	.	.	.	.	.	4279
1.50-1.99	1088	1160	1146	749	266	.	.	.	.	.	4439
2.00-2.49	131	894	118	509	511	.	.	.	.	.	2243
2.50-2.99	.	263	118	135	186	.	.	.	.	.	902
3.00-3.49	.	68	75	18	162	10	.	.	.	.	333
3.50-3.99	.	.	32	15	47	13	.	.	.	.	107
4.00-4.49	.	.	.	18	3	1	.	.	.	.	28
4.50-5.00	.	.	.	.	.	.	.	.	.	.	1
TOTAL	2280	4570	3715	1799	1488	26	0	0	0	0	0

MEAN HS(M) = 1.69 LARGEST HS(M) = 4.69 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 8124

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	28
0.50-0.99	82	145	149	304	80	25	.	.	.	.	287
1.00-1.49	68	1489	1519	2756	1141	228	5	.	.	.	11002
1.50-1.99	53	1580	1334	3742	1018	1545	10	.	.	.	12533
2.00-2.49	.	169	334	222	378	269	278	.	.	.	1183
2.50-2.99	.	169	229	181	269	108	108	.	.	.	1034
3.00-3.49	.	50	229	207	115	44	108	.	.	.	827
3.50-3.99	.	.	16	90	46	33	33	.	.	.	619
4.00-4.49	.	.	8	32	15	11	11	.	.	.	341
4.50-5.00	.	.	.	.	.	.	.	.	.	.	5300
TOTAL	220	3488	11791	11233	15891	22282	14954	2134	58	0	0

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.48 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 47977

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
	6.0	8.0	9.5	10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER			
0.0-0.49	1	3	1	1	1	1	1	1	1	1	1	1	
0.50-0.99	30	52	106	107	17	10	1	1	1	1	1	1	
1.00-1.49	0	126	106	107	17	10	1	1	1	1	1	1	
1.50-1.99	0	10	106	107	17	10	1	1	1	1	1	1	
2.00-2.49	0	0	106	107	17	10	1	1	1	1	1	1	
2.50-2.99	0	0	106	107	17	10	1	1	1	1	1	1	
3.00-3.49	0	0	106	107	17	10	1	1	1	1	1	1	
3.50-3.99	0	0	106	107	17	10	1	1	1	1	1	1	
4.00-4.49	0	0	106	107	17	10	1	1	1	1	1	1	
4.50-4.99	0	0	106	107	17	10	1	1	1	1	1	1	
5.00+	0	0	106	107	17	10	1	1	1	1	1	1	
TOTAL	44	404	768	613	941	636	169	5	0	0	0	2117	

MEAN HS(M) = 3.11 LARGEST HS(M) = 7.10 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2117

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
	6.0	8.0	9.5	10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER			
0.0-0.49	1	1	1	1	1	1	1	1	1	1	1	1	
0.50-0.99	5	2	1	1	1	1	1	1	1	1	1	1	
1.00-1.49	1	1	1	1	1	1	1	1	1	1	1	1	
1.50-1.99	1	1	1	1	1	1	1	1	1	1	1	1	
2.00-2.49	1	1	1	1	1	1	1	1	1	1	1	1	
2.50-2.99	1	1	1	1	1	1	1	1	1	1	1	1	
3.00-3.49	1	1	1	1	1	1	1	1	1	1	1	1	
3.50-3.99	1	1	1	1	1	1	1	1	1	1	1	1	
4.00-4.49	1	1	1	1	1	1	1	1	1	1	1	1	
4.50-4.99	1	1	1	1	1	1	1	1	1	1	1	1	
5.00+	1	1	1	1	1	1	1	1	1	1	1	1	
TOTAL	12	35	9	0	0	0	0	0	0	0	0	36	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.36 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 36

PHASE 3 ST. 19 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.08W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

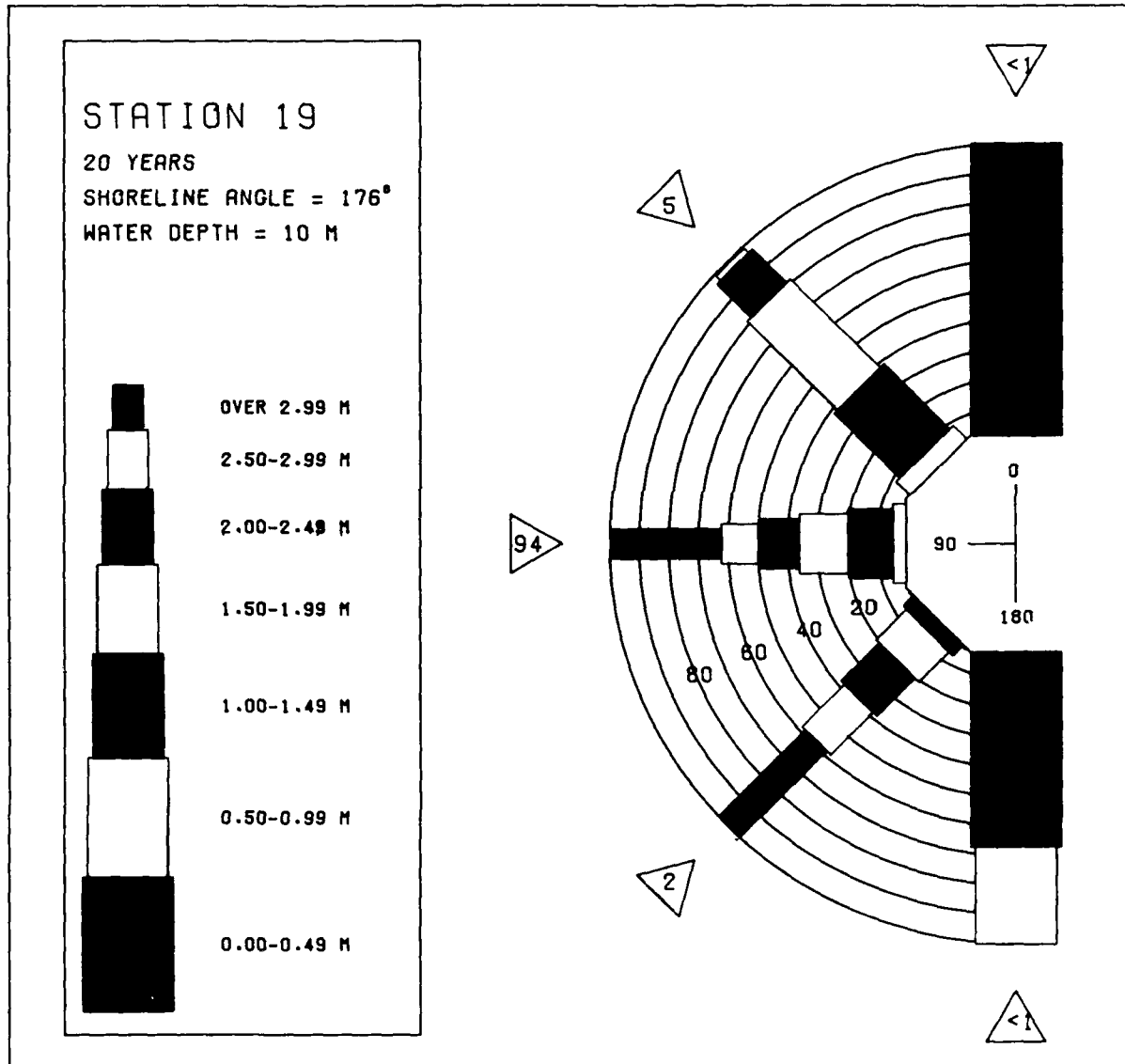
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
	6.0	8.0	9.5	10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER			
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0	0	
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0	0	
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0	0	
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0	0	
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0	0	
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0	0	
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0	0	
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0	0	
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0	0	
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0	0	
5.00+	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 19 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 46.61N/124.10W LAT. LON. END= 46.50N/124.68W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-22.3- LONGER	TOTAL
0.0-0.49	1	1	1	1	9	3	2	1	1	1	1	2
0.50-0.99	34	150	205	37	121	26	7	1	1	1	1	440
1.00-1.49	101	307	689	306	333	271	154	24	1	1	1	1560
1.50-1.99	127	199	461	457	438	271	154	24	1	1	1	1760
2.00-2.49	15	138	138	328	448	512	182	58	1	1	1	1393
2.50-2.99	1	46	61	132	249	442	109	109	1	1	1	1211
3.00-3.49	1	13	42	53	140	290	268	23	1	1	1	1061
3.50-3.99	1	1	26	29	59	290	264	23	1	1	1	919
4.00-4.49	1	1	6	14	21	120	242	21	1	1	1	656
4.50-4.99	1	1	1	4	10	62	352	21	1	1	1	408
5.00+	1	1	1	1	1	1	1	1	1	1	1	548
TOTAL	278	854	1628	1360	1828	2290	1508	209	3	0	0	58440

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.48 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 19 (46.61N/ 124.10W TO 46.50N/ 124.08W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
Y 1954	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
55	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
56	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
57	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
58	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
59	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
61	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
62	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
63	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
64	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
66	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
67	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
68	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
69	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
70	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
71	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
72	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
73	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
74	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
75	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEAN	3.8	3.7	3.2	2.6	2.0	1.6	1.4	1.4	1.8	2.8	3.6	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 19 (46.61N/ 124.10W TO 46.50N/ 124.08W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Y 1954	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
55	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
56	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
57	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
58	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
59	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
60	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
61	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
62	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
63	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
64	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
65	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
66	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
67	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
68	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
69	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
70	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
71	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
72	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
73	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
74	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
75	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6

20 YR. STATISTICS FOR PACIFIC STATION 19 (46.61N/ 124.10W TO 46.50N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	16.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	63102409
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 46.50N/124.08W LAT. LON. END = 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49											0
0.50-0.99											0
1.00-1.49											0
1.50-1.99											0
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00+											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 46.50N/124.08W LAT. LON. END = 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49											0
0.50-0.99											0
1.00-1.49											0
1.50-1.99											0
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00+											0
TOTAL	189	43	0	0	0	0	0	0	0	0	137

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.04 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 137

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 46.50N/124.08W LAT. LON. END = 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49											11
0.50-0.99											128
1.00-1.49											128
1.50-1.99											128
2.00-2.49											128
2.50-2.99											128
3.00-3.49											128
3.50-3.99											128
4.00-4.49											128
4.50-4.99											128
5.00+											128
TOTAL	2305	4266	2878	1066	457	17	0	0	0	0	6446

MEAN HS(M) = 1.64 LARGEST HS(M) = 4.43 MEAN TP(SEC) = 7.6 NUMBER OF CASES = 6446

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 46.50N/124.08W LAT. LON. END = 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49											31
0.50-0.99											3063
1.00-1.49											11563
1.50-1.99											113380
2.00-2.49											11810
2.50-2.99											10992
3.00-3.49											9932
3.50-3.99											8641
4.00-4.49											6189
4.50-4.99											3917
5.00+											5288
TOTAL	261	3778	12500	11925	16870	22789	14986	2140	57	0	49582

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.50 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 49582

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 46.50N/124.08W LAT. LONG. END= 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0.0 - 0.49	1	1	5	18	1	0
0.50 - 0.99	10	61	126	197	22	215
1.00 - 1.49	32	188	167	124	114	577
1.50 - 1.99	8	123	172	189	30	572
2.00 - 2.49	..	42	189	251	161	733
2.50 - 2.99	..	1	158	183	118	539
3.00 - 3.49	..	..	17	70	154	334
3.50 - 3.99	..	..	..	1	73	174
4.00 - 4.49	..	..	..	..	..	..
4.50 - 4.99	..	..	..	..	..	..
5.00 +	..	..	..	..	..	..
TOTAL	51	426	862	624	963	2246

MEAN HS(M) = 3.03 LARGEST HS(M) = 7.06 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2246

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 46.50N/124.08W LAT. LONG. END= 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0.0 - 0.49	1	1	1	..	..	6
0.50 - 0.99	3	10	3	..	..	16
1.00 - 1.49	..	..	..	..	..	..
1.50 - 1.99	..	..	..	..	..	..
2.00 - 2.49	..	..	..	..	..	..
2.50 - 2.99	..	..	..	..	..	..
3.00 - 3.49	..	..	..	..	..	..
3.50 - 3.99	..	..	..	..	..	..
4.00 - 4.49	..	..	..	..	..	..
4.50 - 4.99	..	..	..	..	..	..
5.00 +	..	..	..	..	..	..
TOTAL	10	29	5	0	0	29

MEAN HS(M) = 1.10 LARGEST HS(M) = 1.92 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 29

PHASE 3 ST. 20 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 46.50N/124.08W LAT. LONG. END= 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

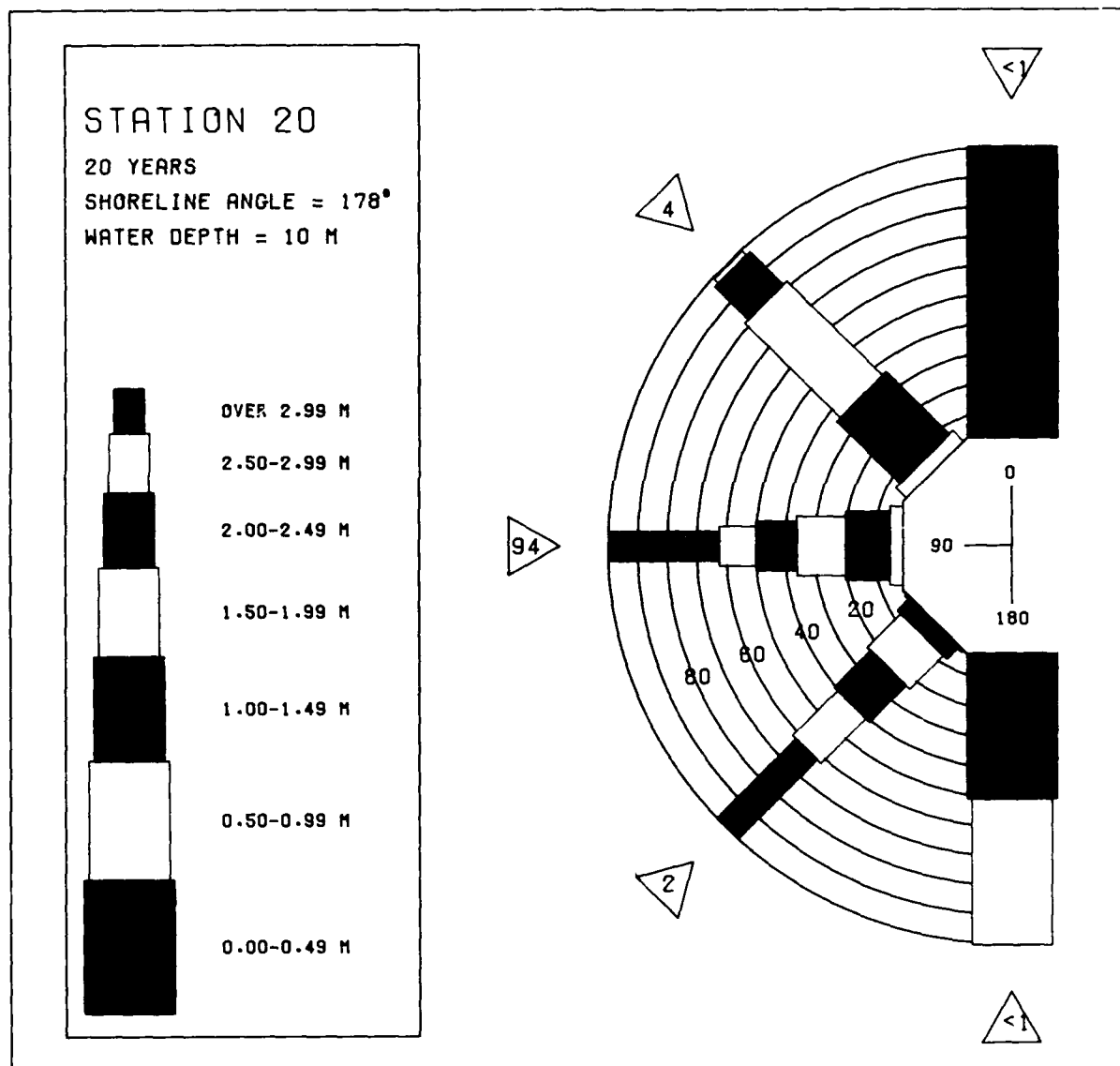
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 20 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 46.50N/124.08W LAT. LONG. END= 46.40N/124.08W
 SHORELINE ANGLE = 178.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	1	2	3	3	3	3	3	3	3	3	3
0.5-0.99	34	148	203	35	117	27	3	3	3	3	434
1.0-1.49	99	306	688	305	117	27	3	3	3	3	1549
1.5-1.99	130	127	464	459	333	152	24	5	5	5	1764
2.0-2.49	16	137	139	331	442	271	57	7	7	7	1400
2.5-2.99	16	49	59	133	454	412	107	5	5	5	1221
3.0-3.49	16	13	40	50	248	518	181	10	10	10	1061
3.5-3.99	16	13	40	50	248	518	181	10	10	10	1061
4.0-4.49	16	13	40	50	248	518	181	10	10	10	1061
4.5-4.99	16	13	40	50	248	518	181	10	10	10	1061
5.00 +	16	13	40	50	248	518	181	10	10	10	1061
TOTAL	280	852	1623	1357	1825	2297	1510	210	3	0	5844

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.50 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 20 (46.50N/ 124.08W TO 46.40N/ 124.08W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	3.8	3.7	3.2	2.7	2.0	1.6	1.4	1.4	1.8	2.8	3.6	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 20 (46.50N/ 124.08W TO 46.40N/ 124.08W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

20 YR. STATISTICS FOR PACIFIC STATION 20 (46.50N/ 124.08W TO 46.40N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LONG. START= 46.40N/124.08W LAT. LONG. END= 46.26N/124.10W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 46.40N/124.08W LAT. LONG. END= 46.26N/124.10W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	49	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.45 LARGEST HS(M) = 2.22 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 30

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 46.40N/124.08W LAT. LONG. END= 46.26N/124.10W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	8	1	.	.	.	.	.	.	.	.	9
0.50 - 0.99	183	107	11	.	.	.	.	.	.	.	301
1.00 - 1.49	898	355	66	10	1	.	.	.	.	.	1330
1.50 - 1.99	1461	711	20	15	3	.	.	.	.	.	2210
2.00 - 2.49	225	669	18	15	.	.	.	.	.	.	912
2.50 - 2.99	3	167	10	3	.	.	.	.	.	.	185
3.00 - 3.49	.	20	10	1	.	.	.	.	.	.	33
3.50 - 3.99	.	1	3	.	.	.	.	.	.	.	5
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2778	2031	143	29	4	0	0	0	0	0	0

MEAN HS(M) = 1.70 LARGEST HS(M) = 3.85 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 2922

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 46.40N/124.08W LAT. LONG. END= 46.26N/124.10W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	6	17	17	17	18	1	.	.	.	.	79
0.50 - 0.99	208	1476	2900	626	171	51	157	.	.	.	5450
1.00 - 1.49	195	2152	7205	3940	1901	5330	137	33	.	.	16116
1.50 - 1.99	145	496	3518	4560	4067	2231	137	33	.	.	13570
2.00 - 2.49	41	398	734	2338	4832	3668	1281	170	.	.	9793
2.50 - 2.99	.	309	201	636	3194	5186	1281	116	.	.	11532
3.00 - 3.49	.	100	68	213	1671	4924	3532	164	.	.	7310
3.50 - 3.99	.	.	41	65	506	3083	3532	270	.	.	4473
4.00 - 4.49	.	.	.	4	152	1433	1507	1	.	.	2709
4.50 - 4.99	.	.	.	3	23	463	1664	17	.	.	2530
5.00 +	.	.	.	1	6	143	17	.	.	.	0
TOTAL	595	4983	14846	12453	16523	21973	15363	2272	79	0	0

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 52088

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOPELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
 SHOPELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1										1
0.50 - 1.00	8	49	95	37	8						197
1.00 - 1.50	1	106	304	92	68						571
1.50 - 2.00	42	68	299	179	239						893
2.00 - 2.50	15	94	186	239	391	56					1136
2.50 - 3.00		23	140	219	407	287	23				1184
3.00 - 3.50		25	73	90	314	242	63				807
3.50 - 4.00		1	23	18	104	183	99				428
4.00 - 4.50			1	15	44	119	77	1			257
4.50 - 5.00				1	10	71	70	5			158
5.00 +				1	3	6	22	1			33
TOTAL	67	436	1122	891	1578	1152	419	10	0	0	

MEAN HS(M) = 2.57 LARGEST HS(M) = 5.58 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 3335

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOPELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
 SHOPELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 1.00	6	5									11
1.00 - 1.50	17	35									52
1.50 - 2.00	8	23	3								34
2.00 - 2.50		8									8
2.50 - 3.00											0
3.00 - 3.50											0
3.50 - 4.00											0
4.00 - 4.50											0
4.50 - 5.00											0
5.00 +											0
TOTAL	31	71	3	0	0	0	0	0	0	0	

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.22 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 64

PHASE 3 ST. 21 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOPELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 46.40N/124.08W LAT. LON. END= 46.26N/124.10W
 SHOPELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

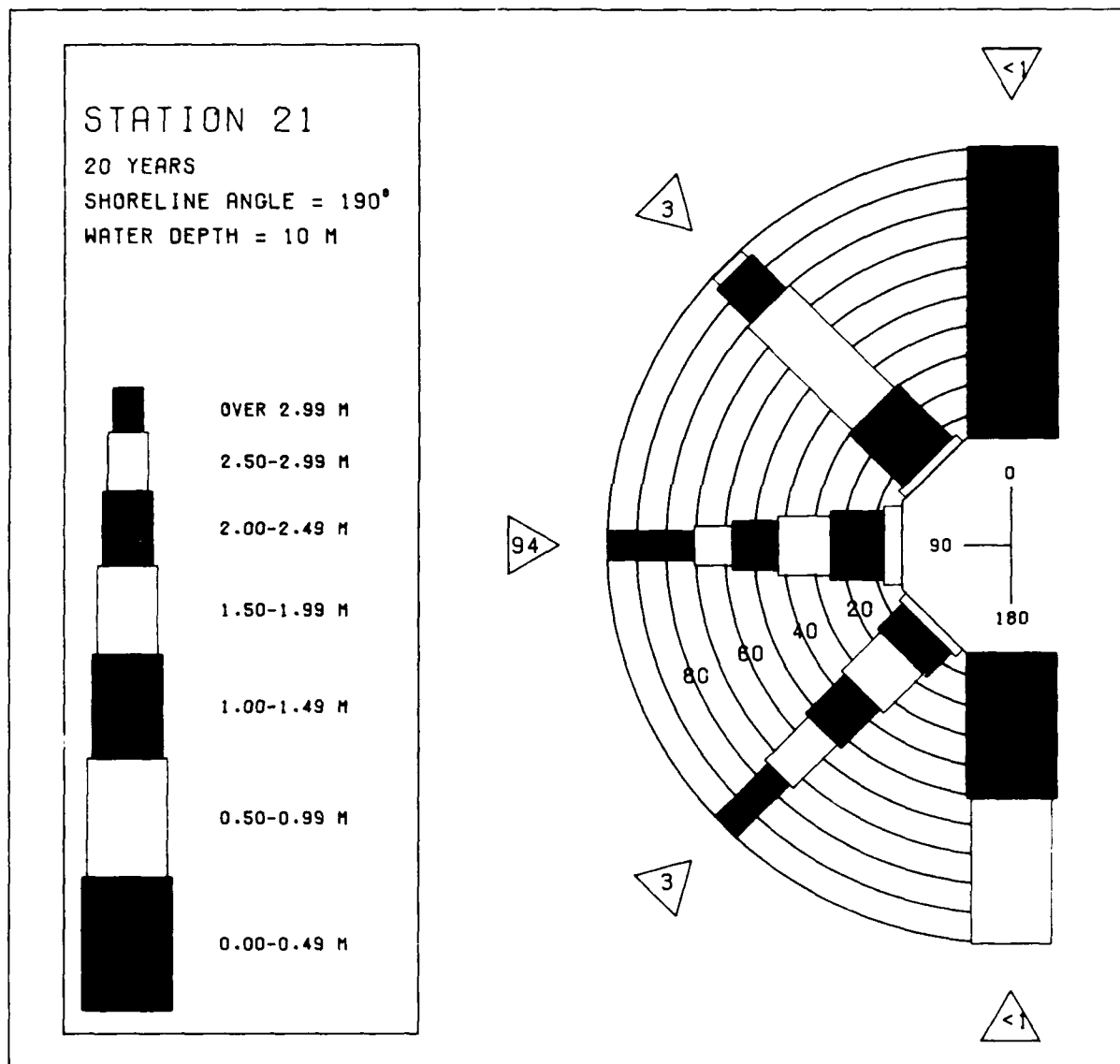
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1										1
0.50 - 1.00											0
1.00 - 1.50											0
1.50 - 2.00											0
2.00 - 2.50											0
2.50 - 3.00											0
3.00 - 3.50											0
3.50 - 4.00											0
4.00 - 4.50											0
4.50 - 5.00											0
5.00 +											0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.44 LARGEST HS(M) = 0.44 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 21 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 46.40N/124.08W LAT. LONG. END= 46.26N/124.10W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	1	4	1	6	17	5	1	3	..	..	7
0.5-0.99	41	163	300	66	197	53	15	..	..	..	593
1.0-1.49	113	265	757	404	430	228	138	10	..	..	1807
1.5-1.99	167	132	384	475	522	405	124	9	..	..	1664
2.0-2.49	28	117	93	260	360	516	192	11	1	..	1559
2.5-2.99	..	55	35	85	198	326	259	16	2	..	1287
3.0-3.49	..	14	24	30	61	157	341	27	..	..	1052
3.5-3.99	..	..	4	5	19	55	258	27	..	..	772
4.0-4.49	..	..	..	..	1	12	197	29	..	..	470
4.5-4.99	..	..	..	..	..	..	148	91	..	..	284
5.0+	..	..	..	..	..	..	..	..	..	..	254
TOTAL	350	750	1607	1333	1808	2307	1573	223	5	0	58440

MEAN HS(M) = 2.43 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
 HIS STATION 21 (46.40N/ 124.08W TO 46.26N/ 124.10W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	3.3	3.2	2.9	2.5	1.8	1.5	1.4	1.3	1.6	2.6	3.4	3.6	

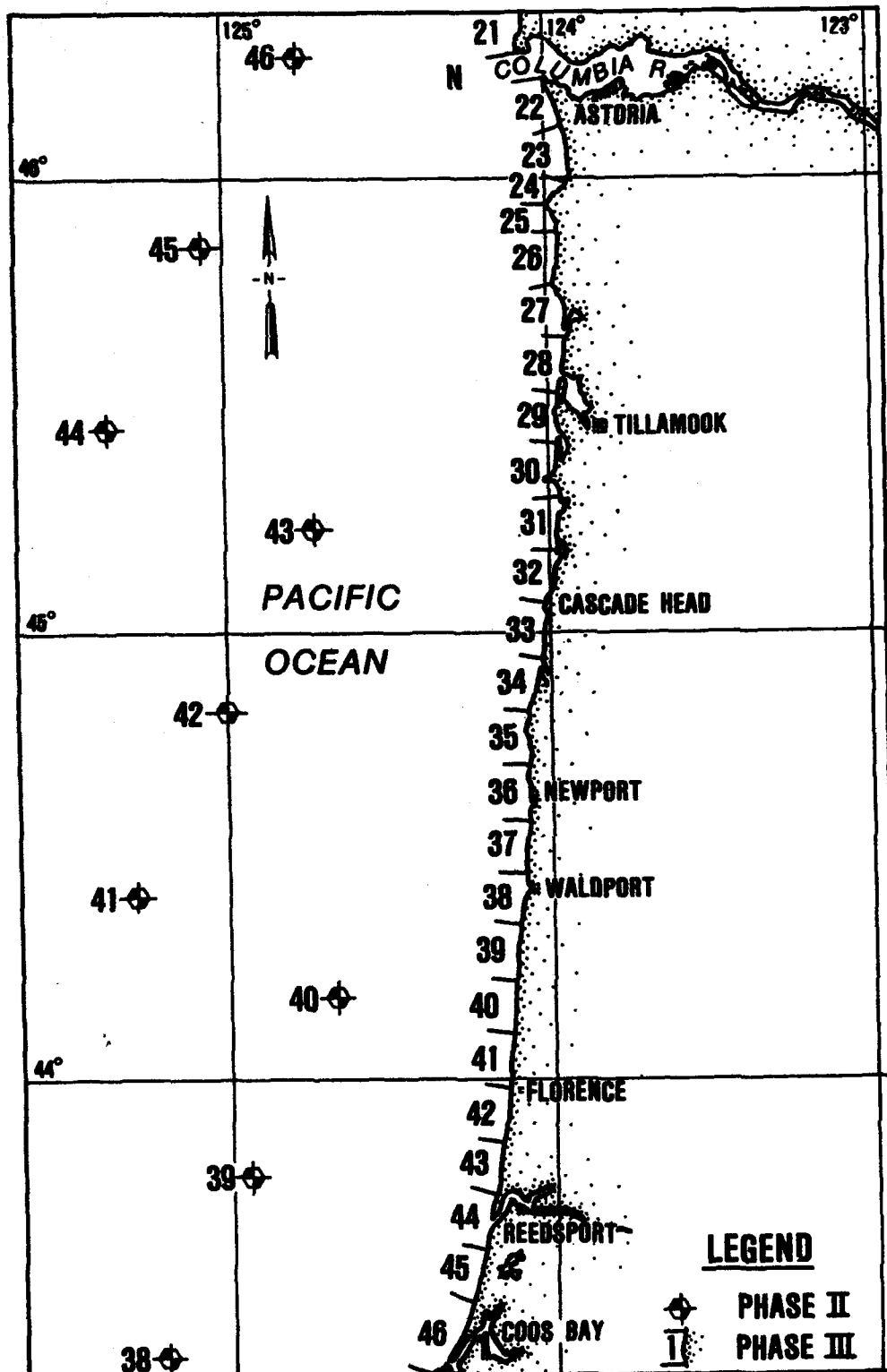
LARGEST HS(METERS) BY MONTH AND YEAR
 HIS STATION 21 (46.40N/ 124.08W TO 46.26N/ 124.10W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

20 YR. STATISTICS FOR PACIFIC STATION 21 (46.40N/ 124.08W TO 46.26N/ 124.10W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.00
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.1
LARGEST WAVE HS	(METERS)	14.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.4
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	85.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

Appendix B: Sta 22 through 45



PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LONG. START= 46.21N/124.01W LAT. LONG. END= 46.10N/123.95W
 SHORELINE ANGLE= 158.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 46.21N/124.01W LAT. LONG. END= 46.10N/123.95W
 SHORELINE ANGLE= 158.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	142	165	.	.	.	.	.	.	.	.	11
0.50 - 0.99	889	1600	.	.	.	.	.	.	.	.	145
1.00 - 1.49	181	200	.	.	.	.	.	.	.	.	1154
1.50 - 1.99	1	1	.	.	.	.	.	.	.	.	341
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	21
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1324	349	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.58 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 981

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 46.21N/124.01W LAT. LONG. END= 46.10N/123.95W
 SHORELINE ANGLE= 158.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	20	70	27	1	142	75	18	.	.	.	137
0.50 - 0.99	347	1966	3524	852	1914	457	116	.	.	.	6924
1.00 - 1.49	503	2472	7289	4091	1914	657	116	22	.	.	17064
1.50 - 1.99	559	1030	2558	3954	3244	1659	258	18	.	.	13280
2.00 - 2.49	22	633	422	1165	3324	2284	436	32	.	.	8316
2.50 - 2.99	.	224	160	355	1902	3181	920	51	.	.	6793
3.00 - 3.49	.	30	116	116	828	2280	1180	56	.	.	4589
3.50 - 3.99	.	.	44	42	282	1312	1055	111	.	.	2846
4.00 - 4.49	.	.	10	10	41	564	1067	107	.	.	1739
4.50 - 4.99	.	.	.	1	11	114	564	112	.	.	802
5.00 +	.	.	.	.	1	8	388	200	.	.	597
TOTAL	1451	6425	14133	10587	11689	12092	6603	709	0	0	0

MEAN HS(M) = 2.02 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 36890

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 46.21N/124.01W LAT. LONG. END= 46.10N/123.95W
 SHORELINE ANGLE= 158.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	133	1	183	100	15	5	.	.	.	10
0.50 - 0.99	10	1233	444	841	1906	366	3	.	.	.	881
1.00 - 1.49	47	1154	737	708	1406	1054	29	3	.	.	3125
1.50 - 1.99	22	1311	379	708	1529	2543	285	73	13	.	4096
2.00 - 2.49	.	1522	301	352	1529	2543	337	46	25	.	5590
2.50 - 2.99	.	148	172	231	826	2543	1572	106	29	.	5423
3.00 - 3.49	.	68	159	196	429	2667	1724	148	6	.	4797
3.50 - 3.99	.	13	49	68	393	1103	2644	159	.	.	3829
4.00 - 4.49	.	.	17	29	159	550	1445	183	1	.	2364
4.50 - 4.99	.	.	3	10	23	159	905	284	.	.	1447
5.00 +	.	.	.	.	23	159	506	55	.	.	1214
TOTAL	81	792	2162	2629	5842	10425	9314	1456	78	0	0

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.06 MEAN TP(SEC) = 12.4 NUMBER OF CASES = 19181

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	11	.	.	.	.	.	.	.	.	0
0.50 - 0.99	13	78	11	.	.	.	.	.	.	.	102
1.00 - 1.49	46	140	46	.	.	.	.	.	.	.	252
1.50 - 1.99	22	73	128	11	23	1	.	.	.	.	300
2.00 - 2.49	.	68	179	119	128	3	.	.	.	.	498
2.50 - 2.99	.	47	130	140	118	37	15	.	.	.	477
3.00 - 3.49	.	.	50	102	147	53	15	.	.	.	333
3.50 - 3.99	.	1	3	20	99	51	15	.	.	.	181
4.00 - 4.49	.	.	.	10	27	27	11	.	.	.	110
4.50 - 4.99	.	.	.	1	13	49	15	.	.	.	78
5.00 +	.	.	.	.	.	.	.	.	.	.	.
TOTAL	82	418	532	465	587	221	58	0	0	0	

MEAN HS(M) = 3.06 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 1383

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	3	.	.	.	.	.	.	.	.	.	3
1.00 - 1.49	1	.	.	.	.	.	.	.	.	.	1
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.15 LARGEST HS(M) = 1.98 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 5

PHASE 3 ST. 22 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 46.21N/124.01W LAT. LON. END= 46.10N/123.95W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 22 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 46.21N/124.01W LAT. LONG. END= 46.10N/123.95W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	3	7	2	10	24	6	2	5	1	1	13
0.50-0.99	50	210	396	103	232	102	30	1	1	1	794
1.00-1.49	151	287	803	493	466	271	150	1	1	1	2143
1.50-1.99	83	146	298	468	487	271	150	1	1	1	1705
2.00-2.49	6	87	158	158	460	337	150	1	1	1	1419
2.50-2.99	1	44	75	70	572	330	150	1	1	1	1266
3.00-3.49	1	14	38	45	137	438	207	1	1	1	980
3.50-3.99	1	1	12	21	82	246	310	1	1	1	600
4.00-4.49	1	1	3	5	29	108	251	1	1	1	425
4.50-4.99	1	1	1	2	14	41	148	1	1	1	234
5.00+	1	1	1	1	1	1	1	1	1	1	10
TOTAL	293	796	1678	1305	1808	2269	1533	213	5	0	58440

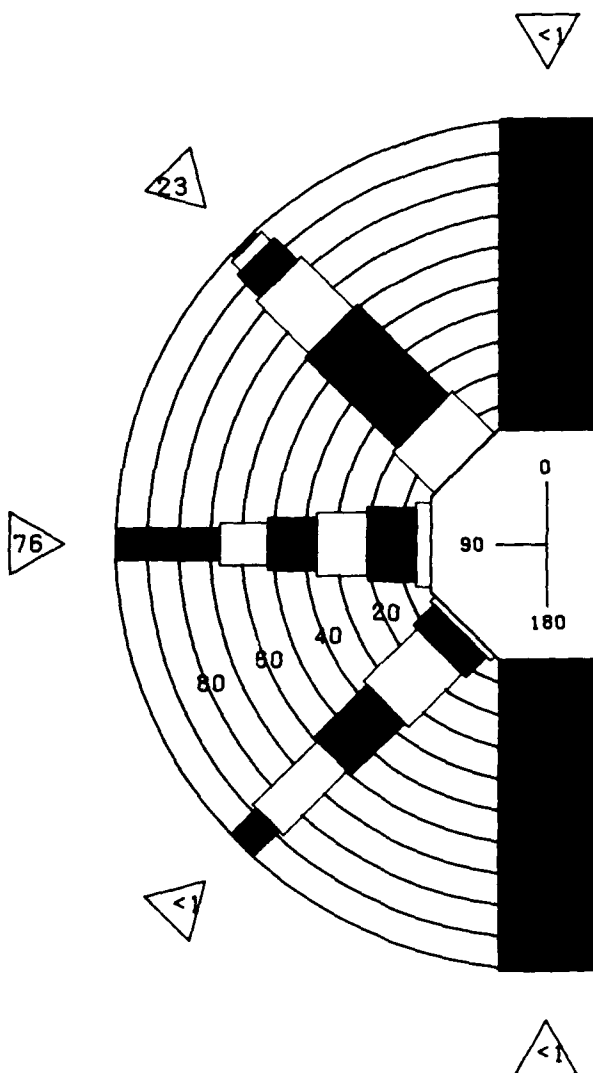
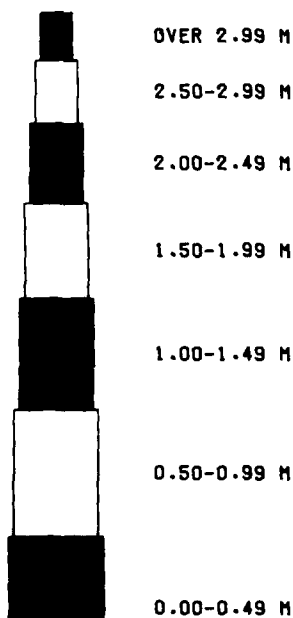
MEAN HS(M) = 2.30 LARGEST HS(M) = 7.06 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440

STATION 22

20 YEARS

SHORELINE ANGLE = 158°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 22 (46.21N/ 124.01W TO 46.10N/ 123.95W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1957	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1958	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1959	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1960	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1961	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1962	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1963	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1964	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1965	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1966	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1967	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1968	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1969	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1970	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1971	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1972	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1973	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1974	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
1975	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5
MEAN	3.3	3.1	2.8	2.3	1.7	1.4	1.3	1.2	1.5	2.4	3.2	3.5	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 22 (46.21N/ 124.01W TO 46.10N/ 123.95W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1957	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1958	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1959	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1960	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1961	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1962	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1963	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1964	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1965	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1966	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1967	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1968	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1969	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1970	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1971	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1972	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1973	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1974	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
1975	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5

20 YR. STATISTICS FOR PACIFIC STATION 22 (46.21N/ 124.01W TO 46.10N/ 123.95W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	75.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0.0 - 14.9
 LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49											0
0.50											0
0.51											0
0.52											0
0.53											0
0.54											0
0.55											0
0.56											0
0.57											0
0.58											0
0.59											0
0.60											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49											3
0.50											200
0.51											162
0.52											20
0.53											
0.54											
0.55											
0.56											
0.57											
0.58											
0.59											
0.60											
TOTAL	205	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.25 LARGEST HS(M) = 1.93 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 121

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49											43
0.50											3170
0.51											8162
0.52											3622
0.53											2059
0.54											1203
0.55											437
0.56											183
0.57											46
0.58											0
0.59											
0.60											
TOTAL	2693	5730	6832	3993	4313	2055	1	0	0	0	0

MEAN HS(M) = 1.75 LARGEST HS(M) = 4.99 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 14985

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49											74
0.50											3327
0.51											10684
0.52											11135
0.53											10646
0.54											9918
0.55											8730
0.56											6553
0.57											4349
0.58											2572
0.59											2283
0.60											
TOTAL	95	1488	8829	8940	12850	20373	15415	2203	78	0	0

MEAN HS(M) = 2.60 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 41092

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	1	18	35	5	11	1	1	1	1	1	
0.50 - 0.99	10	126	114	32	11	1	1	1	1	1	
1.00 - 1.49	37	145	176	83	20	1	1	1	1	1	
1.50 - 1.99	17	66	234	121	119	23	1	1	1	1	
2.00 - 2.49	1	61	121	155	212	68	3	1	1	1	
2.50 - 2.99	1	42	116	171	290	130	3	1	1	1	
3.00 - 3.49	1	1	37	53	203	147	30	1	1	1	
3.50 - 3.99	1	1	1	11	94	111	51	1	1	1	
4.00 - 4.49	1	1	1	10	37	61	30	1	1	1	
4.50 - 4.99	1	1	1	1	8	61	53	3	0	0	
TOTAL	65	459	834	641	994	602	190	6	0	0	

MEAN HS(M) = 2.90 LARGEST HS(M) = 6.30 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 2232

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	1	1	1	1	1	1	1	1	1	1	
0.50 - 0.99	1	1	1	1	1	1	1	1	1	1	
1.00 - 1.49	1	1	1	1	1	1	1	1	1	1	
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	
TOTAL	14	1	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.08 LARGEST HS(M) = 1.64 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 10

PHASE 3 ST. 23 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 46.10N/123.95W LAT. LON. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

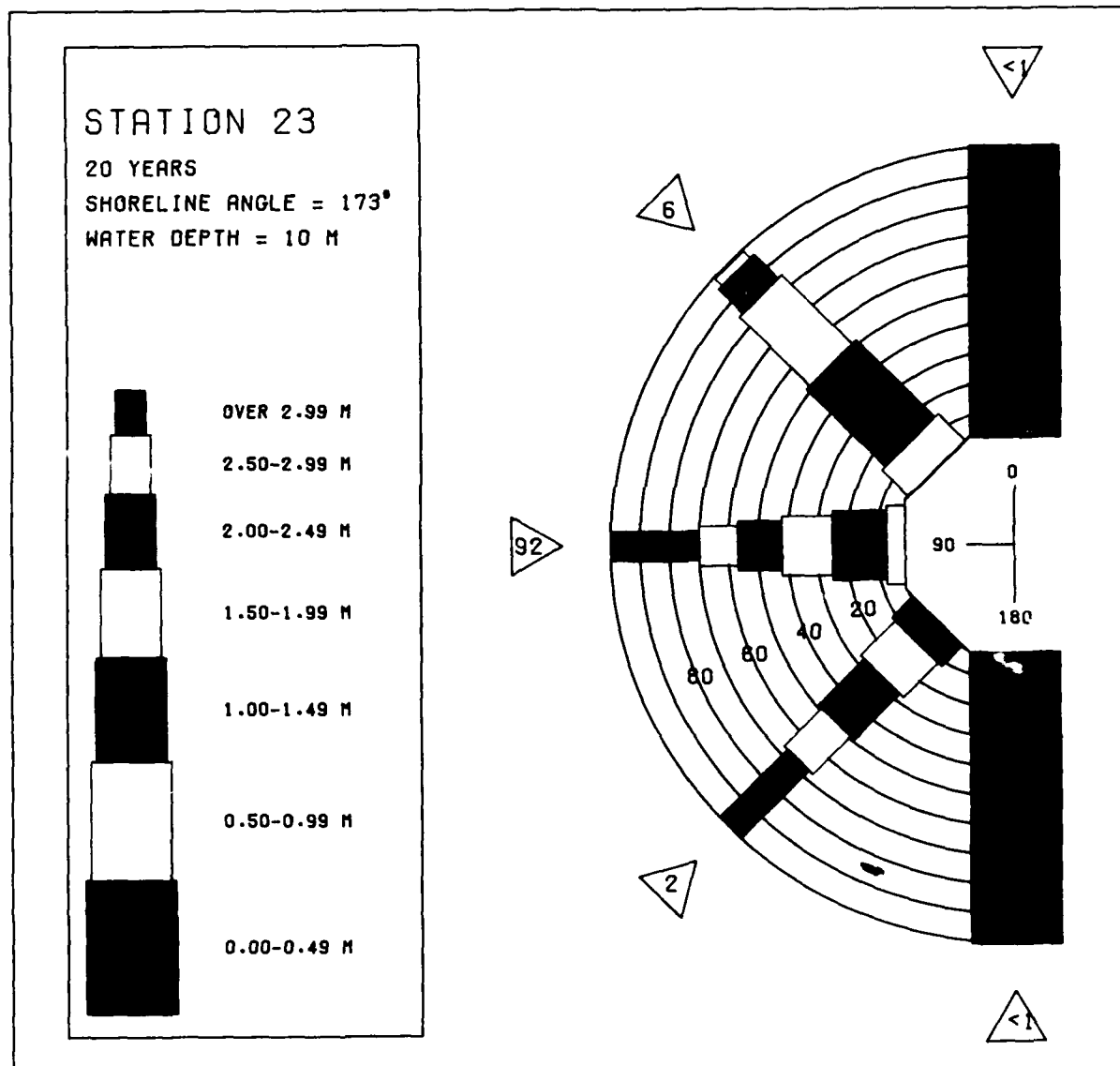
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	1	1	1	1	1	1	1	1	1	1	
0.50 - 0.99	1	1	1	1	1	1	1	1	1	1	
1.00 - 1.49	1	1	1	1	1	1	1	1	1	1	
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 23 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 46.10N/123.95W LAT. LONG. END= 46.00N/123.93W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	2	5	1	7	18	1	1	3	1	1	655
0.50-0.99	44	181	331	75	224	5	16	3	1	1	1938
1.00-1.49	135	272	785	436	422	67	39	9	1	1	1819
1.50-1.99	114	150	356	486	522	235	120	7	1	1	1482
2.00-2.49	11	97	28	216	327	417	198	12	1	1	1257
2.50-2.99	1	14	41	81	188	550	276	108	3	1	1068
3.00-3.49	1	1	3	14	24	104	317	255	1	1	743
3.50-3.99	1	1	1	1	7	148	270	228	1	1	477
4.00-4.49	1	1	1	1	1	49	130	68	1	1	273
4.50-4.99	1	1	1	1	1	20	10	6	1	1	239
TOTAL	306	764	1645	1354	1813	2298	1557	216	7	0	58440

MEAN HS(M) = 2.39 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 23 (46.10N/ 123.95W TO 46.00N/ 123.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1957	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1958	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1959	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1960	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1961	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1962	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1963	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1964	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1965	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1966	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1967	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1968	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1969	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1970	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1971	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1972	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1973	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1974	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5
1975	3.4	3.2	2.9	2.4	1.8	1.4	1.3	1.3	1.6	2.5	3.3	3.6	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 23 (46.10N/ 123.95W TO 46.00N/ 123.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1957	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1958	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1959	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1960	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1961	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1962	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1963	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1964	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1965	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1966	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1967	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1968	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1969	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1970	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1971	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1972	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1973	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1974	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1975	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

20 YR. STATISTICS FOR PACIFIC STATION 23 (46.10N/ 123.95W TO 46.00N/ 123.93W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.00
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	90.00
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	19.6
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	63102406
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 46.00N/123.93W LAT. LONG. END= 45.95N/124.00W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 46.00N/123.93W LAT. LONG. END= 45.95N/124.00W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 46.00N/123.93W LAT. LONG. END= 45.95N/124.00W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	10	.	.	.	.	.	.	.	.	.	10
0.50 - 0.99	148	80	6	.	.	.	.	.	.	.	234
1.00 - 1.49	944	234	18	.	.	.	.	.	.	.	1196
1.50 - 1.99	1132	610	11	3	.	.	.	.	.	.	1756
2.00 - 2.49	138	444	13	.	.	.	.	.	.	.	595
2.50 - 2.99	.	109	8	.	.	.	.	.	.	.	114
3.00 - 3.49	.	10	3	.	.	.	.	.	.	.	16
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	3
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2372	1487	64	3	0	0	0	0	0	0	2301

MEAN HS(M) = 1.66 LARGEST HS(M) = 3.68 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 2301

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 46.00N/123.93W LAT. LONG. END= 45.95N/124.00W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	25	40	15	.	.	.	.	.	.	.	91
0.50 - 0.99	223	1514	203	631	171	25	15	.	.	.	5575
1.00 - 1.49	2232	2222	2408	3966	1919	2533	157	3	.	.	12649
1.50 - 1.99	2524	2222	3528	4664	4073	2533	157	3	.	.	12649
2.00 - 2.49	56	1666	700	2280	483	2533	157	3	.	.	11633
2.50 - 2.99	.	104	162	217	162	2533	157	3	.	.	8738
3.00 - 3.49	.	.	39	65	100	2533	157	3	.	.	4634
3.50 - 3.99	.	.	.	3	23	157	157	3	.	.	271
4.00 - 4.49	.	.	.	.	.	157	157	3	.	.	2528
4.50 - 4.99	.	.	.	.	.	157	157	3	.	.	2528
5.00 +	.	.	.	.	.	157	157	3	.	.	2528
TOTAL	844	5487	14979	12501	16520	21935	15368	2286	79	0	52621

MEAN HS(M) = 2.45 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 52621

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	1	1	3	1	.	.	.	.	.	3
0.50 - 0.99	8	58	107	37	11	.	.	.	.	.	22
1.00 - 1.49	1	100	350	107	28	75	3	.	.	.	40
1.50 - 1.99	46	78	308	196	42	21	3	.	.	.	27
2.00 - 2.49	15	100	191	248	36	31	3	.	.	.	24
2.50 - 2.99	.	20	142	207	59	66	7	.	.	.	98
3.00 - 3.49	.	.	68	20	22	11	1	.	.	.	33
3.50 - 3.99	.	.	1	3	8	4	3	.	.	.	18
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	2
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	2
5.00 +	.	.	.	.	.	.	.	.	.	.	2
TOTAL	71	440	1186	916	158	120	46	11	0	0	3447

MEAN HS(M) = 2.50 LARGEST HS(M) = 5.50 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 3447

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	100	47	1	.	.	.	.	.	.	.	153
1.50 - 1.99	8	22	3	.	.	.	.	.	.	.	38
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	31	80	4	0	0	0	0	0	0	0	70

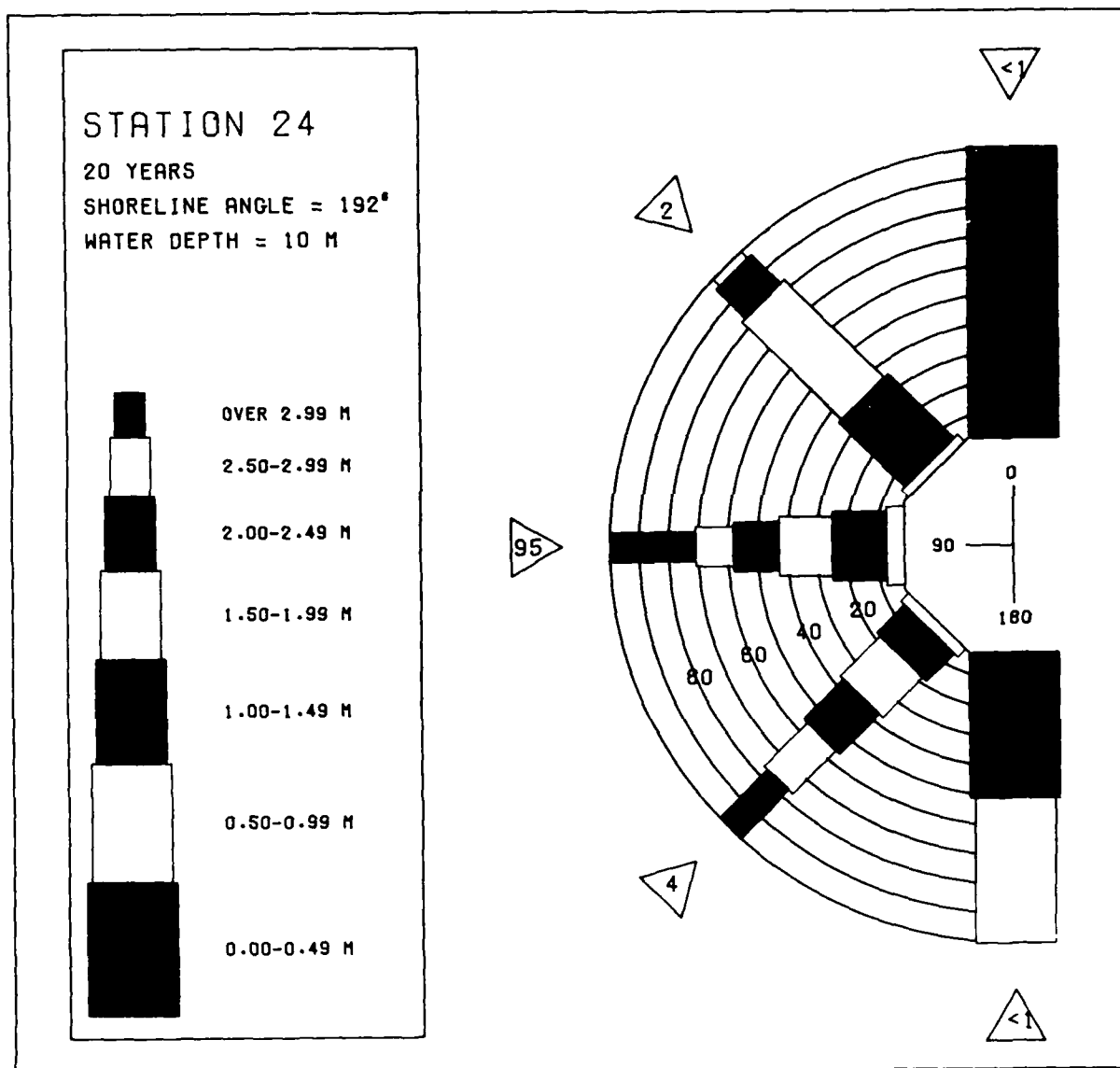
MEAN HS(M) = 1.43 LARGEST HS(M) = 2.20 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 70

PHASE 3 ST. 24 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 46.00N/123.93W LAT. LON. END= 45.95N/124.00W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.42 LARGEST HS(M) = 0.42 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 24 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 46.00N/123.93W LAT. LONG. END= 45.95N/124.00W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE (X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 24 (46.00N/ 123.93W TO 45.95N/ 124.00W)

MONTH

[illegible]

MEAN

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 24 (46.00N/ 123.93W TO 45.95N/ 124.00W)

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 24 (46.00N/ 123.93W TO 45.95N/ 124.00W)

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 12.4
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 11
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.1
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.7
LARGEST WAVE HS . . . . . (METERS) 17.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 86.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . . . 63102409

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PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.89N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	35	20	.	.	.	.	.	.	.	.	55
1.00 - 1.49	85	124	1	.	.	.	.	.	.	.	209
1.50 - 1.99	.	41	.	.	.	.	.	.	.	.	42
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	123	185	1	0	0	0	0	0	0	0	183

MEAN HS(M) = 1.20 LARGEST HS(M) = 1.75 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 183

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	6	0	0	0	0	0	0	0	0	0	6
0.50 - 0.99	20	21	22	30	16	10	3	0	0	0	73
1.00 - 1.49	33	27	22	35	14	10	3	0	0	0	115
1.50 - 1.99	33	27	22	35	14	10	3	0	0	0	115
2.00 - 2.49	33	27	22	35	14	10	3	0	0	0	115
2.50 - 2.99	33	27	22	35	14	10	3	0	0	0	115
3.00 - 3.49	33	27	22	35	14	10	3	0	0	0	115
3.50 - 3.99	33	27	22	35	14	10	3	0	0	0	115
4.00 - 4.49	33	27	22	35	14	10	3	0	0	0	115
4.50 - 4.99	33	27	22	35	14	10	3	0	0	0	115
5.00 +	33	27	22	35	14	10	3	0	0	0	115
TOTAL	1157	5892	15509	13302	16974	22645	15330	2252	92	0	54450

MEAN HS(M) = 2.61 LARGEST HS(M) = 7.42 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 54450

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49											0
0.50-0.99	27	145	61	1							234
1.00-1.49	6	184	313	73	15						591
1.50-1.99	23	205	236	231	135	6					866
2.00-2.49	3	112	231	253	349	107					1056
2.50-2.99		44	184	268	314	181	11				1003
3.00-3.49			155	131	386	331	58				1071
3.50-3.99		10	3	94	231	321	70	1			776
4.00-4.49				27	114	152	80				379
4.50-4.99				17	53	95	68	3			336
5.00+				1	13	66	82	8			170
TOTAL	59	703	1272	1096	1610	1259	370	13	0	0	

MEAN HS(M) = 2.76 LARGEST HS(M) = 6.51 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 3747

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49											1
0.50-0.99	1	11									12
1.00-1.49	11	32	1								44
1.50-1.99	5	20	3								28
2.00-2.49		8	1								9
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00+											0
TOTAL	18	71	5	0	0	0	0	0	0	0	

MEAN HS(M) = 1.40 LARGEST HS(M) = 2.46 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 59

PHASE 3 ST. 25 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49											1
0.50-0.99	1										1
1.00-1.49											0
1.50-1.99											0
2.00-2.49											0
2.50-2.99											0
3.00-3.49											0
3.50-3.99											0
4.00-4.49											0
4.50-4.99											0
5.00+											0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 0.49 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 25 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 45.95N/124.00W LAT. LON. END= 45.88N/123.96W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.49	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	7
0.50-0.99	27	147	222	50	16	5	3	4	4	4	474
1.00-1.49	68	313	784	372	149	39	11	2	2	2	1738
1.50-1.99	36	138	471	489	356	170	26	5	5	5	1691
2.00-2.49	1	59	169	325	488	299	66	7	2	2	1353
2.50-2.99	..	20	42	118	431	463	125	12	1	1	1208
3.00-3.49	..	3	12	40	243	556	201	18	..	..	1096
3.50-3.99	..	..	..	2	116	429	268	27	..	..	865
4.00-4.49	..	..	..	2	38	264	276	28	..	..	616
4.50-4.99	..	..	..	2	12	113	250	27	..	..	404
5.00+	..	..	..	..	5	48	340	113	..	..	506
TOTAL	135	682	1675	1435	1854	2336	1566	219	6	0	58440

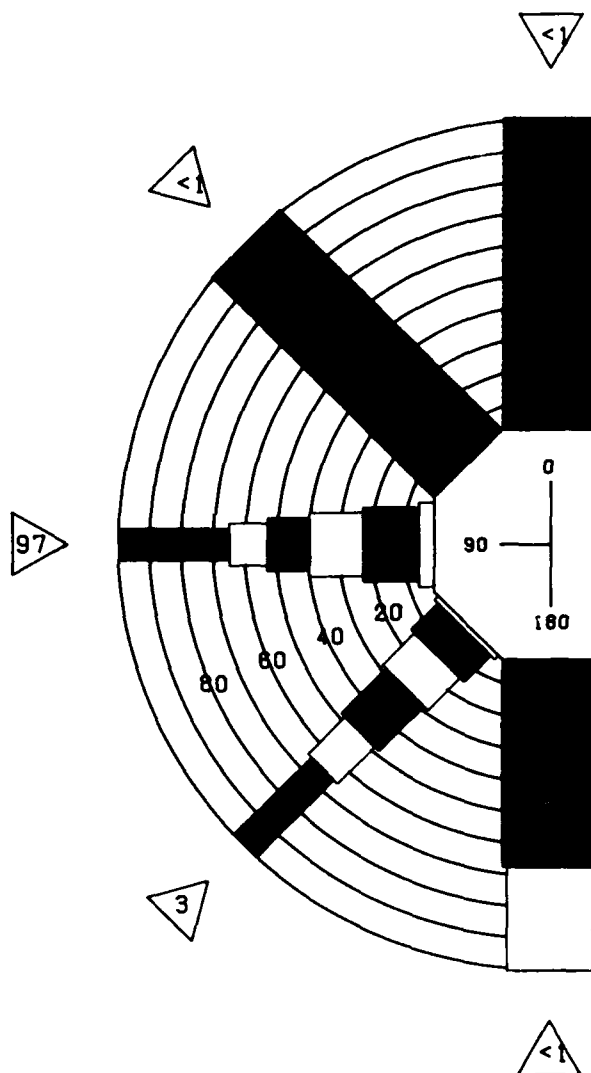
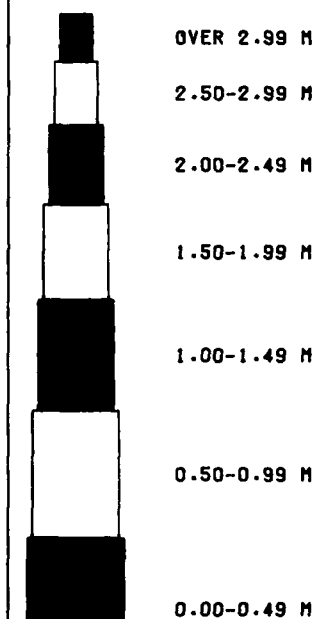
MEAN HS(M) = 2.62 LARGEST HS(M) = 7.42 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440

STATION 25

20 YEARS

SHORELINE ANGLE = 190°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 25 (45.95N/ 124.00W TO 45.88N/ 123.96W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1957	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1958	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1959	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1960	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1961	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1962	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1963	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1964	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1965	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1966	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1967	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1968	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1969	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1970	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1971	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1972	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1973	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1974	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
1975	3.3	3.3	3.3	3.1	3.7	3.4	1.7	1.3	1.6	2.5	3.1	3.3	2.5
MEAN	3.7	3.6	3.2	2.6	1.9	1.6	1.4	1.3	1.7	2.8	3.6	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 25 (45.95N/ 124.00W TO 45.88N/ 123.96W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1957	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1958	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1959	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1960	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1961	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1962	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1963	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1964	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1965	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1966	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1967	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1968	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1969	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1970	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1971	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1972	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1973	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1974	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
1975	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6

20 YR. STATISTICS FOR PACIFIC STATION 25 (45.95N/ 124.00W TO 45.88N/ 123.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90-100
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	16.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	63
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

[illegible]

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)						TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	-	-	-	-	-	-	-	-	-	0
0.50	-	-	-	-	-	-	-	-	-	-	1
1.00	-	-	-	-	-	-	-	-	-	-	1
1.50	-	-	-	-	-	-	-	-	-	-	102
2.00	102	-	-	-	-	-	-	-	-	-	102
2.50	22	15	-	-	-	-	-	-	-	-	37
3.00	-	-	-	-	-	-	-	-	-	-	0
3.50	-	-	-	-	-	-	-	-	-	-	0
4.00	-	-	-	-	-	-	-	-	-	-	0
4.50	-	-	-	-	-	-	-	-	-	-	0
5.00	-	-	-	-	-	-	-	-	-	-	0
5.50	-	-	-	-	-	-	-	-	-	-	0
6.00	-	-	-	-	-	-	-	-	-	-	0
TOTAL	125	15	0	0	0	0	0	0	0	0	83
MEAN HS(M) = 1.42	LARGEST HS(M) = 1.99		MEAN TP(SEC) = 5.3		NUMBER OF CASES = 83						

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-	0	0	1	5	.	.	.	.	.	.	.	11
0.50	126	241	73	5	.	.	.	.	.	.	.	435
1.00	740	710	302	35	6	3	.	.	.	.	.	1799
1.50	1250	836	102	22	1	.	.	.	.	.	.	2271
2.00	118	879	144	.	.	.	.	.	.	.	.	1031
2.50	.	203	65	3	.	.	.	.	.	.	.	271
3.00	.	39	35	1	.	.	.	.	.	.	.	75
3.50	.	1	5	1	.	.	.	.	.	.	.	0
4.00	.	.	.	.	.	.	.	.	.	.	.	0
4.50	.	.	.	.	.	.	.	.	.	.	.	0
5.00	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2244	2969	617	67	7	3	0	0	0	0	0	3461
MEAN HS(M) = 1.68	LARGEST HS(M) = 3.78		MEAN TP(SEC) = 6.5		NUMBER OF CASES = 3461							

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0											
0.50											
1.00											
1.50											
2.00											
2.50											
3.00											
3.50											
4.00											
4.50											
5.00											
TOTAL	309	4029	14222	13205	17083	22864	15274				

MEAN HS(M) = 2.72 LARGEST HS(M) = 7.40 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 52185

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	8	32	10	.	.	.	.	.	.	3
0.5-0.99	6	107	191	18	51	3	.	.	.	322	
1.0-1.49	20	157	179	121	164	82	.	.	.	531	
1.5-1.99	3	83	163	181	201	186	3	.	.	663	
2.0-2.49	.	47	133	107	253	231	44	.	.	831	
2.5-2.99	.	11	56	22	260	186	22	1	.	719	
3.0-3.49	.	3	13	29	112	154	47	.	.	679	
3.5-3.99	.	.	1	13	70	71	49	.	.	355	
4.0-4.99	.	.	.	.	22	90	71	8	.	204
5.00+	37	440	961	765	1234	866	236	9	0	194	

MEAN HS(M) = 2.99 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2674

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	.	.	.	.	.	.	.	.	1
0.5-0.99	8	5	.	.	.	.	.	.	.	13
1.0-1.49	0	2	1	.	.	.	.	.	.	3
1.5-1.99	.	11	.	.	.	.	.	.	.	12
2.0-2.49	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	0
4.0-4.99	.	.	.	.	.	.	.	.	.	0
5.00+	18	38	2	0	0	0	0	0	0	0	

MEAN HS(M) = 1.63 LARGEST HS(M) = 2.24 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 37

PHASE 3 ST. 26 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 45.88N/123.96W LAT. LON. END= 45.76N/124.00W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	
0.5-0.99	0	
1.0-1.49	0	
1.5-1.99	0	
2.0-2.49	0	
2.5-2.99	0	
3.0-3.49	0	
3.5-3.99	0	
4.0-4.99	0	
5.00+	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 26 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 45.88N/123.96W LAT. LONG. END= 45.76N/124.00W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.1	6.1-8.1	8.1-9.5	9.5-10.5	10.5-11.7	11.7-13.3	13.3-15.3	15.3-18.1	18.1-22.2	22.2-22.3	LONGER	TOTAL
0.00-0.49	6	10	10	10	10	10	10	10	10	10	10	37
0.50-0.99	24	110	175	30	13	2	2	4	4	4	4	27
1.00-1.49	95	279	402	416	121	24	2	2	2	2	2	44
1.50-1.99	138	175	471	450	323	100	2	2	2	2	2	22
2.00-2.49	14	127	125	128	45	33	1	1	1	1	1	11
2.50-2.99	..	10	17	16	22	10	1	1	1	1	1	11
3.00-3.49	..	..	5	3	11	3	1	1	1	1	1	11
3.50-3.99	..	..	..	..	7	1	1	1	1	1	1	11
4.00-4.49	..	..	..	..	1	1	1	1	1	1	1	11
4.50-4.99	..	..	..	..	1	1	1	1	1	1	1	11
5.00+	..	..	..	..	1	1	1	1	1	1	1	11
TOTAL	272	747	1575	1399	1829	2370	1546	215	7	0	0	5280

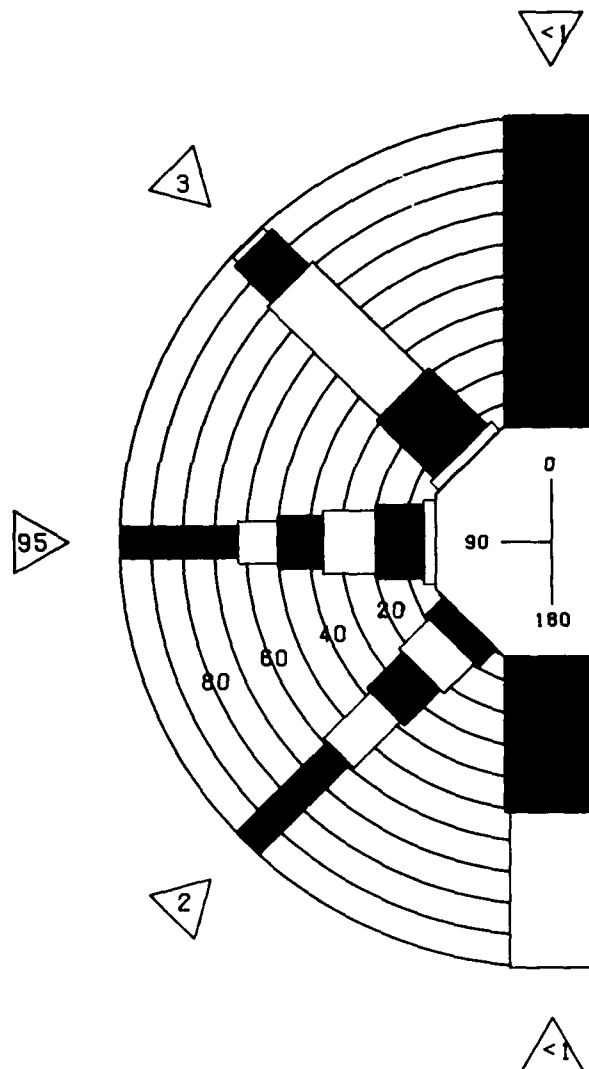
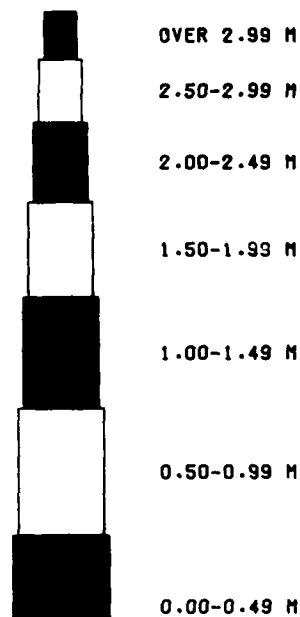
MEAN HS(M) = 2.67 LARGEST HS(M) = 7.40 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440

STATION 26

20 YEARS

SHORELINE ANGLE = 184°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 26 (45.88N/ 123.96W TO 45.76N/ 124.00W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1957	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1958	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1959	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1960	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1961	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1962	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1963	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1964	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1965	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1966	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1967	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1968	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1969	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1970	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1971	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1972	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1973	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1974	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
1975	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7
MEAN	3.8	3.6	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.0	2.7

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 26 (45.88N/ 123.96W TO 45.76N/ 124.00W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1957	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1958	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1959	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1960	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1961	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1962	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1963	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1964	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1965	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1966	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1967	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1968	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1969	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1970	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1971	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1972	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1973	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1974	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7
1975	6.6	6.2	6.1	6.7	6.3	6.7	6.5	6.1	6.6	6.6	6.9	6.9	6.7

20 YR. STATISTICS FOR PACIFIC STATION 26 (45.88N/ 123.96W TO 45.76N/ 124.00W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.7
MOST FREQUENT 50.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.4
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	63.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0.49	.	.	.	.	.	.	.	.	.	0
0.5	0.99	.	.	.	.	.	.	.	.	.	0
1.0	1.49	.	.	.	.	.	.	.	.	.	0
1.5	1.99	.	.	.	.	.	.	.	.	.	0
2.0	2.49	.	.	.	.	.	.	.	.	.	0
2.5	2.99	.	.	.	.	.	.	.	.	.	0
3.0	3.49	.	.	.	.	.	.	.	.	.	0
3.5	3.99	.	.	.	.	.	.	.	.	.	0
4.0	4.49	.	.	.	.	.	.	.	.	.	0
4.5	4.99	.	.	.	.	.	.	.	.	.	0
5.0	5.49	.	.	.	.	.	.	.	.	.	0
5.5	5.99	.	.	.	.	.	.	.	.	.	0
6.0	6.49	.	.	.	.	.	.	.	.	.	0
6.5	6.99	.	.	.	.	.	.	.	.	.	0
7.0	7.49	.	.	.	.	.	.	.	.	.	0
7.5	7.99	.	.	.	.	.	.	.	.	.	0
8.0	8.49	.	.	.	.	.	.	.	.	.	0
8.5	8.99	.	.	.	.	.	.	.	.	.	0
9.0	9.49	.	.	.	.	.	.	.	.	.	0
9.5	9.99	.	.	.	.	.	.	.	.	.	0
10.0	10.49	.	.	.	.	.	.	.	.	.	0
10.5	10.99	.	.	.	.	.	.	.	.	.	0
11.0	11.49	.	.	.	.	.	.	.	.	.	0
11.5	11.99	.	.	.	.	.	.	.	.	.	0
12.0	12.49	.	.	.	.	.	.	.	.	.	0
12.5	12.99	.	.	.	.	.	.	.	.	.	0
13.0	13.49	.	.	.	.	.	.	.	.	.	0
13.5	13.99	.	.	.	.	.	.	.	.	.	0
14.0	14.49	.	.	.	.	.	.	.	.	.	0
14.5	14.99	.	.	.	.	.	.	.	.	.	0
15.0	15.49	.	.	.	.	.	.	.	.	.	0
15.5	15.99	.	.	.	.	.	.	.	.	.	0
16.0	16.49	.	.	.	.	.	.	.	.	.	0
16.5	16.99	.	.	.	.	.	.	.	.	.	0
17.0	17.49	.	.	.	.	.	.	.	.	.	0
17.5	17.99	.	.	.	.	.	.	.	.	.	0
18.0	18.49	.	.	.	.	.	.	.	.	.	0
18.5	18.99	.	.	.	.	.	.	.	.	.	0
19.0	19.49	.	.	.	.	.	.	.	.	.	0
19.5	19.99	.	.	.	.	.	.	.	.	.	0
20.0	20.49	.	.	.	.	.	.	.	.	.	0
20.5	20.99	.	.	.	.	.	.	.	.	.	0
21.0	21.49	.	.	.	.	.	.	.	.	.	0
21.5	21.99	.	.	.	.	.	.	.	.	.	0
22.0	22.49	.	.	.	.	.	.	.	.	.	0
22.5	22.99	.	.	.	.	.	.	.	.	.	0
23.0	23.49	.	.	.	.	.	.	.	.	.	0
23.5	23.99	.	.	.	.	.	.	.	.	.	0
24.0	24.49						

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)						TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	5
0.5	5	0	0	0	0	0	0	0	0	0	41
1.0	1	0	0	0	0	0	0	0	0	0	587
1.5	564	23	0	0	0	0	0	0	0	0	597
2.0	343	254	0	0	0	0	0	0	0	0	42
2.5	1	41	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
5.5	0	0	0	0	0	0	0	0	0	0	0
6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	954	318	0	0	0	0	0	0	0	0	746

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.25 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 746

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0	0	0	0	0	0	0	0	0	0	31
0.5	-	189	860	1250	227	56	23	1	0	0	0	2611
1.0	-	513	2029	3747	1457	473	88	6	0	0	0	8313
1.5	-	775	1131	1979	1938	1260	376	1	0	0	0	7430
2.0	-	58	764	357	1067	160	727	5	0	0	0	4739
2.5	-	.	253	140	266	119	1113	11	0	0	0	2977
3.0	-	.	35	106	88	62	1172	133	0	0	0	2441
3.5	-	.	.	27	34	207	768	152	0	0	0	1593
4.0	-	.	.	1	6	30	388	77	0	0	0	502
4.5	-	.	.	1	.	1	92	32	0	0	0	125
5.0	-	.	.	.	.	.	11	29	0	0	0	40
TOTAL		1541	5089	7614	5084	5563	4758	453	0	0	0	
MEAN HS(M) = 1.95		LARGEST HS(M) = 5.62		MEAN TP(SEC) = 9.6		NUMBER OF CASES = 17612						

[illegible]

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
5.5	0	0	0	0	0	0	0	0	0	0	0
6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	26	273	523	432	728	434	78	1	0	0	1472

MEAN HS(M) = 3.34 LARGEST HS(M) = 6.90 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1472

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
5.5	0	0	0	0	0	0	0	0	0	0	0
6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	10	1	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.16 LARGEST HS(M) = 1.59 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 8

PHASE 3 ST. 27 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

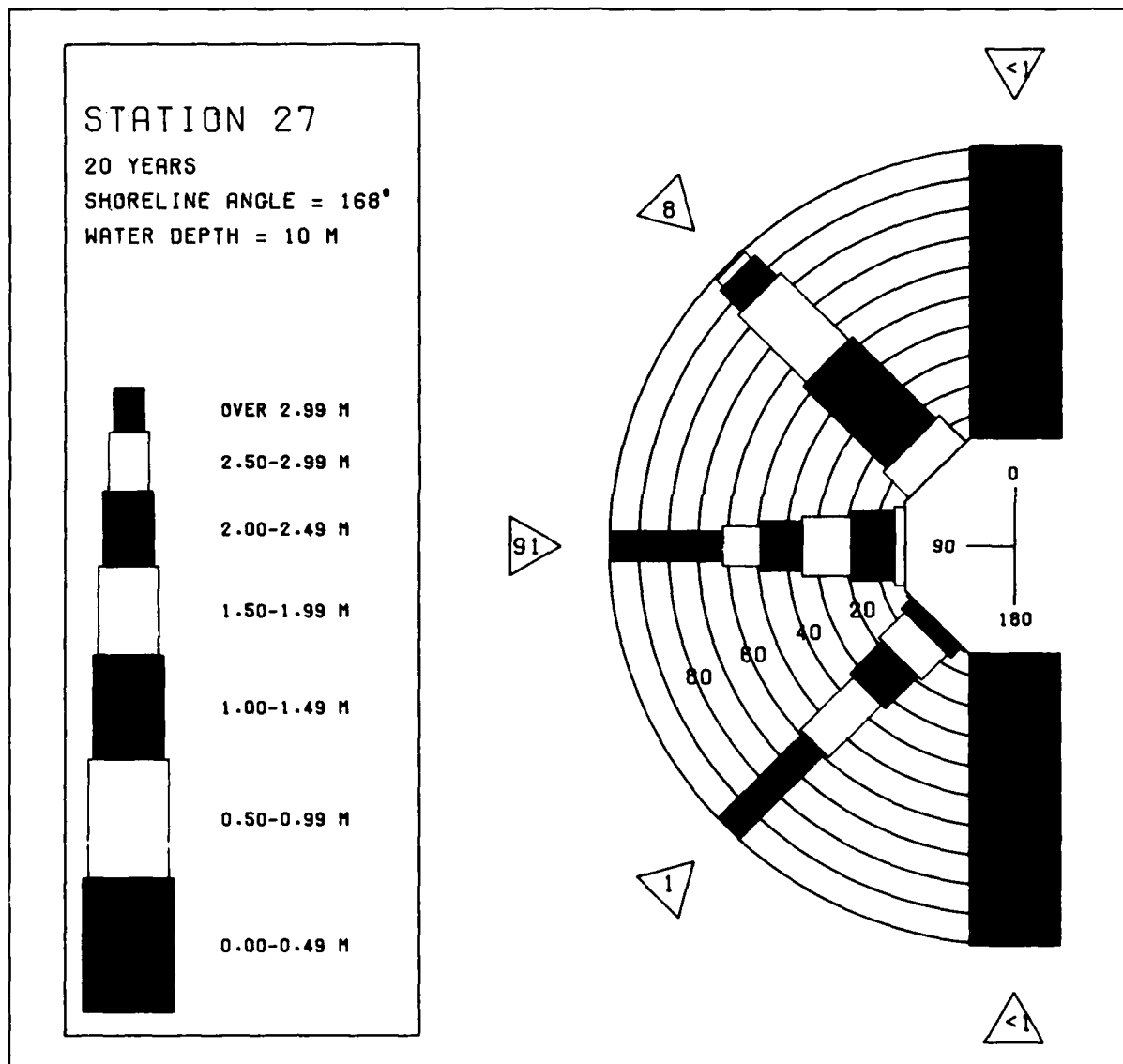
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
5.5	0	0	0	0	0	0	0	0	0	0	0
6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 27 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 45.76N/124.00W LAT. LON. END= 45.65N/123.95W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	4
0.50-0.99	28	124	201	49	14	4	2	2	4	..	426
1.00-1.49	109	288	718	353	143	41	11	2	..	..	1665
1.50-1.99	118	187	448	471	356	182	22	6	..	..	1790
2.00-2.49	7	109	105	311	470	289	65	1	..	..	1370
2.50-2.99	..	44	57	115	398	461	127	8	..	..	1211
3.00-3.49	..	8	25	55	333	518	206	13	..	..	1079
3.50-3.99	..	..	24	13	153	419	264	19	..	..	883
4.00-4.49	..	..	6	5	25	268	266	25	..	..	631
4.50-4.99	..	..	..	..	11	101	239	27	..	..	397
5.00-5.49	..	..	..	..	63	63	324	105	..	..	503
5.50-5.99	..	..	..	..	11	11	11	11	..	..	..
TOTAL	263	761	1605	1415	1829	2347	1526	211	7	0	58440

MEAN HS(M) = 2.63 LARGEST HS(M) = 7.38 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440



MONTH

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 27 (45.76N/ 124.00W TO 45.65N/ 123.95W)

20 YR. STATISTICS FOR PACIFIC STATION 27 (45.76N/ 124.00W TO 45.65N/ 123.95W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	4.4
LARGEST WAVE TP	(SECONDS)	16.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	(DATE)	63102408

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	61	.	.	.	.	.	.	.	.	.	61
1.00 - 1.49	15	8	.	.	.	.	.	.	.	.	23
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	77	8	0	0	0	0	0	0	0	0	85

MEAN HS(M) = 1.42 LARGEST HS(M) = 1.92 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 51

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	11	1	3	.	.	.	.	.	.	11
0.50 - 0.99	106	111	22	3	.	.	.	.	.	.	242
1.00 - 1.49	720	455	118	20	1	1	.	.	.	.	1315
1.50 - 1.99	1288	776	37	11	.	.	.	.	.	.	2112
2.00 - 2.49	130	814	18	.	.	.	.	.	.	.	962
2.50 - 2.99	.	157	22	.	.	.	.	.	.	.	189
3.00 - 3.49	.	18	25	1	.	.	.	.	.	.	44
3.50 - 3.99	.	.	3	.	.	.	.	.	.	.	4
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2254	2331	256	36	1	1	0	0	0	0	2859

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.63 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 2859

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	11	1694	379	126	10	27	1	42	.	3325
0.50 - 0.99	116	908	6565	3110	1260	339	275	18	.	.	13660
1.00 - 1.49	131	2176	6565	4551	4330	1536	224	51	.	.	13660
1.50 - 1.99	124	722	1064	3341	4330	2733	600	70	.	.	13660
2.00 - 2.49	34	407	261	1050	4202	591	1600	220	.	.	13660
2.50 - 2.99	.	253	203	378	2165	333	1878	123	.	.	13660
3.00 - 3.49	.	78	111	162	1018	333	2687	171	.	.	13660
3.50 - 3.99	.	1	41	70	380	333	2687	171	.	.	13660
4.00 - 4.49	.	.	5	15	66	333	2687	171	.	.	13660
4.50 - 4.99	.	.	.	.	46	333	2687	171	.	.	13660
5.00 +	.	.	.	.	.	333	2687	171	.	.	13660
TOTAL	406	4566	14383	13043	16918	22732	15282	2185	91	0	52393

MEAN HS(M) = 2.71 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 52393

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 45.65N/123.95W LAT. LONG. END = 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.	0.49	.	.	.	.	.	.	.	.	.	.	0
1.	0.49	8	63	29	.	.	.	.	.	.	.	100
2.	0.49	20	136	213	27	.	.	.	.	.	.	382
3.	0.49	3	186	225	172	82	.	.	.	.	.	690
4.	0.49	3	92	225	229	246	5	.	.	.	.	854
5.	0.49	.	166	231	231	332	119	.	.	.	.	893
6.	0.49	.	3	140	124	332	254	42	1	.	.	901
7.	0.49	.	.	53	94	107	258	46	.	.	.	686
8.	0.49	.	.	13	27	63	157	68	1	.	.	373
9.	0.49	.	.	.	18	1	80	51	.	.	.	213
10.	0.49	.	.	.	1	1	85	71	.	.	.	176
+	0.49	.	.	.	.	.	.	16	.	.	.	
TOTAL		37	537	1069	923	1366	1041	284	11	0	0	3096
MEAN HS(M) = 2.89		LARGEST HS(M) = 6.62		MEAN TP(SEC) = 10.5		NUMBER OF CASES = 3096						

PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
LAT. LONG. START = 45.65N/123.95W LAT. LONG. END = 45.53N/123.96W
SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	1
0.5	1	0	0	0	0	0	0	0	0	0	3
1.0	1	1	0	0	0	0	0	0	0	0	2
1.5	1	1	0	0	0	0	0	0	0	0	2
2.0	1	1	0	0	0	0	0	0	0	0	2
2.5	1	1	0	0	0	0	0	0	0	0	2
3.0	1	1	0	0	0	0	0	0	0	0	2
3.5	1	1	0	0	0	0	0	0	0	0	2
4.0	1	1	0	0	0	0	0	0	0	0	2
4.5	1	1	0	0	0	0	0	0	0	0	2
5.0	1	1	0	0	0	0	0	0	0	0	2
5.5	1	1	0	0	0	0	0	0	0	0	2
6.0	1	1	0	0	0	0	0	0	0	0	2
TOTAL	20	42	3	0	0	0	0	0	0	0	41
MEAN HS(M) = 1.55	LARGEST HS(M) = 2.53		MEAN TP(SEC) = 6.7		NUMBER OF CASES =		41				

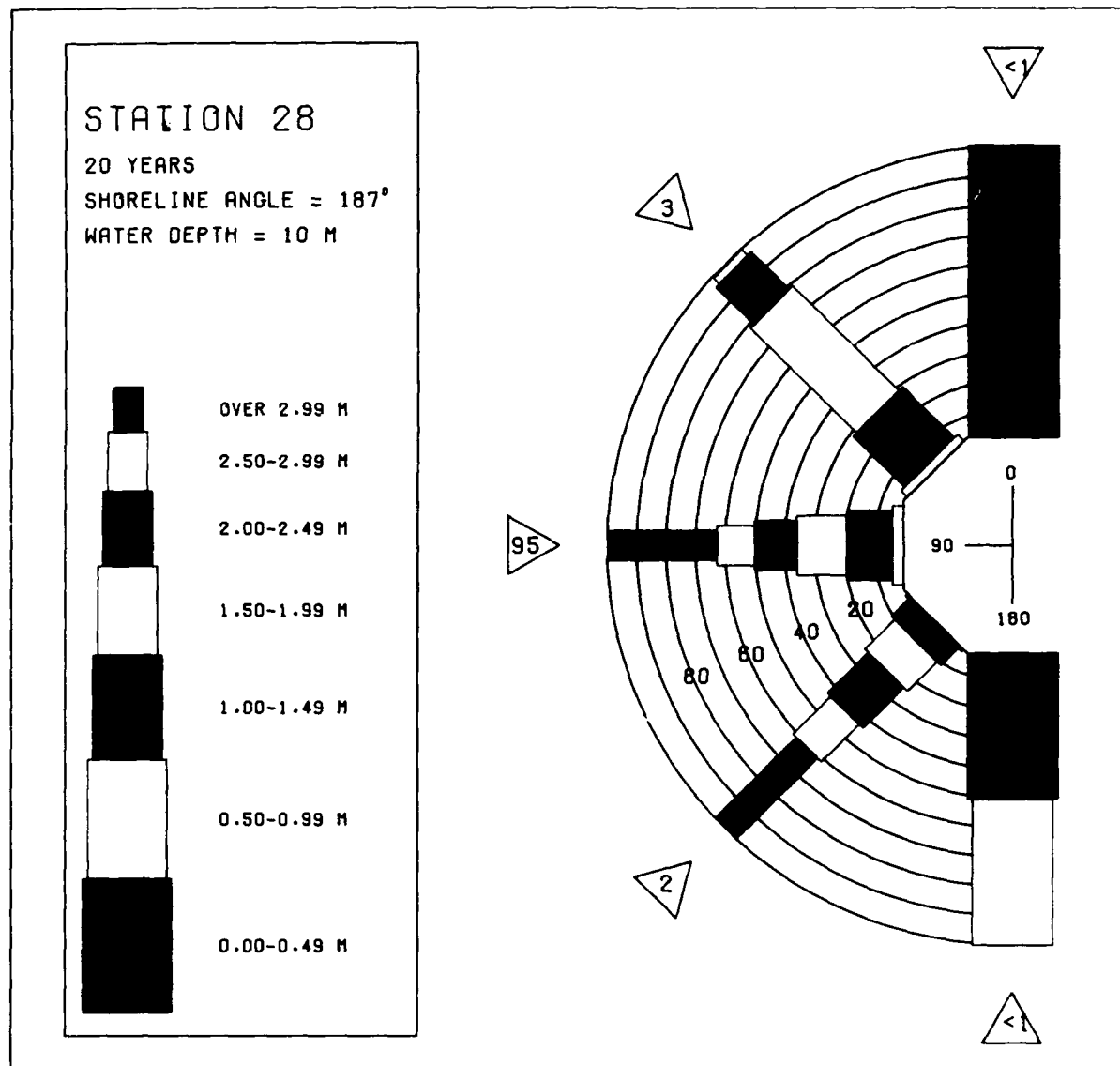
PHASE 3 ST. 28 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LONG. START= 45.65N/123.95W LAT. LONG. END= 45.53N/123.96W
SHORELINE ANGLE = 187.0 (JEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL	
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER		
1.00	
1.10	
1.20	
1.30	
1.40	
1.50	
1.60	
1.70	
1.80	
1.90	
2.00	
2.10	
2.20	
2.30	
2.40	
2.50	
2.60	
2.70	
2.80	
2.90	
3.00	
3.10	
3.20	
3.30	
3.40	
3.50	
3.60	
3.70	
3.80	
3.90	
4.00	
4.10	
4.20	
4.30	
4.40	
4.50	
4.60	
4.70	
4.80	
4.90	
5.00	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	
MEAN HS(M) = 0.	LARGEST HS(M) = 0.										MEAN TP(SEC) = 0.	NUMBER OF CASES = 0

PHASE 3 ST. 28 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 45.65N/123.95W LAT. LON. END= 45.53N/123.96W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER		
0.0-0.49	1	1										3
0.50-0.99	23	108	174	38	12		2		4			364
1.00-1.49	93	278	689	315	120	32	7					1535
1.50-1.99	145	171	470	471	343	155	22	1				1782
2.00-2.49	16	132	128	357	464	284	60	6				1447
2.50-2.99		47	49	129	449	450	118	7	2			1251
3.00-3.49		10	36	50	252	562	194	12				1116
3.50-3.99			16	25	124	441	274	17	1			893
4.00-4.49			5	3	41	278	277	27				637
4.50-4.99					14	114	252	28				411
5.00+					6	54	347	113				520
TOTAL	278	747	1567	1397	1825	2374	1553	216	7	0		58440

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

[illegible]

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK HAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(SECONDS)	7.3
WAVE ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	87.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	17	.	.	.	.	.	.	.	.	.	17
0.50 - 0.99	400	80	.	.	.	.	.	.	.	.	480
1.00 - 1.49	304	22	.	.	.	.	.	.	.	.	326
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	724	115	0	0	0	0	0	0	0	0	839
TOTAL	724	115	0	0	0	0	0	0	0	0	839

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 492

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10	10	5	.	.	.	.	.	.	.	25
0.50 - 0.99	213	633	453	35	10	1	.	.	.	.	1346
1.00 - 1.49	1155	1415	1671	210	32	11	.	.	.	.	4061
1.50 - 1.99	58	1220	864	107	42	.	.	.	.	.	3398
2.00 - 2.49	.	913	213	71	22	.	.	.	.	.	1277
2.50 - 2.99	.	215	85	34	17	.	.	.	.	.	351
3.00 - 3.49	.	30	61	5	22	.	.	.	.	.	118
3.50 - 3.99	.	.	25	15	11	.	.	.	.	.	51
4.00 - 4.49	.	.	8	.	3	.	.	.	.	.	11
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	2158	4436	3385	477	159	12	1	0	0	0	6222
TOTAL	2158	4436	3385	477	159	12	1	0	0	0	6222

MEAN HS(M) = 1.56 LARGEST HS(M) = 4.13 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 6222

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 45.53N/123.96W LAT. LON. END= 45.41N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	23	11	.	.	.	.	.	.	.	.	35
0.50 - 0.99	49	535	2113	619	224	87	42	10	.	.	3720
1.00 - 1.49	10	704	5227	3933	1904	627	167	23	.	.	12596
1.50 - 1.99	32	174	2888	4506	4094	2424	1373	77	.	.	14614
2.00 - 2.49	17	133	509	2549	5020	3836	1120	73	.	.	13275
2.50 - 2.99	.	35	201	698	3328	5648	2043	124	.	.	12092
3.00 - 3.49	.	11	100	254	1670	5251	2797	215	.	.	10308
3.50 - 3.99	.	3	23	83	420	3213	3222	294	.	.	7264
4.00 - 4.49	.	.	3	22	112	1379	2835	387	.	.	4689
4.50 - 4.99	.	.	.	1	53	448	1932	378	.	.	2845
5.00 +	108	1618	11075	12705	16826	23054	16214	2401	96	0	2654
TOTAL	108	1618	11075	12705	16826	23054	16214	2401	96	0	2654

MEAN HS(M) = 2.57 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49172

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 45.53N/123.26W LAT. LONG. END = 45.41N/123.26W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
5.0	1											1
4.5	1											1
4.0	1											1
3.5	1											1
3.0	1											1
2.5	1											1
2.0	1											1
1.5	1											1
1.0	1											1
0.5	1											1
0.0	1											1
TOTAL		46	446	854	740	1178	773	205	6	0	0	1166
MEAN HS(M) = 2.75		LARGEST HS(M) = 5.79				MEAN TP(SEC) = 10.4		NUMBER OF CASES = 2500				

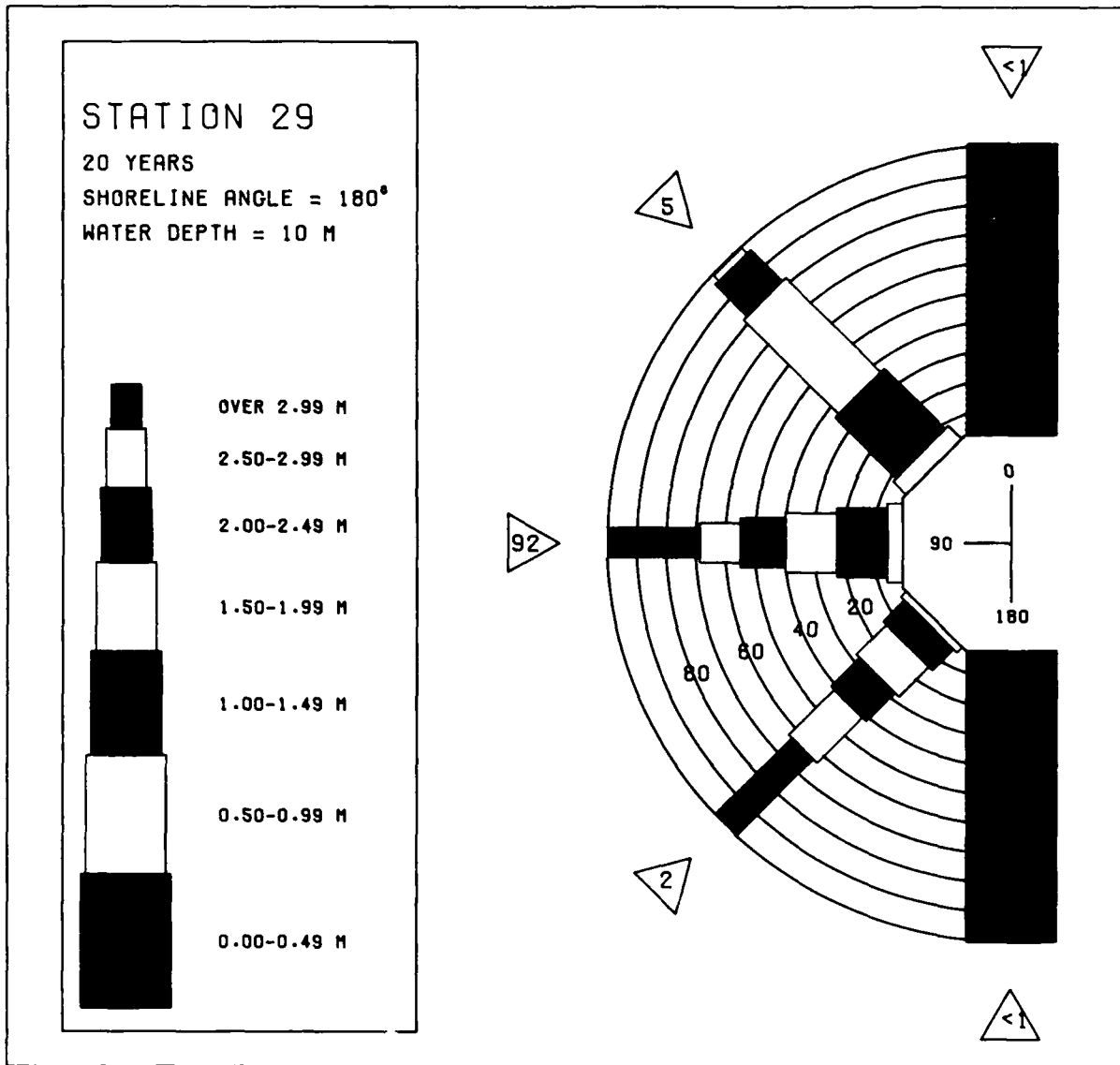
PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES) = 335.0 - 164.9
LAT. LONG. START= 45.53N/123.96W LAT. LONG. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0											18
0.5	3	15									18
1.0	11	12	13								46
1.5	1	18									19
2.0		1									1
2.5											0
3.0											0
3.5											0
4.0											0
4.5											0
5.0											0
5.5											0
6.0											0
TOTAL	15	59	13	0	0	0	0	0	0	0	54
MEAN HS(M) = 1.20	LARGEST HS(M) = 2.00				MEAN TP(SEC) = 7.0		NUMBER OF CASES =			54	

PHASE 3 ST. 29 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LONG. START = 45.53N/123.96W LAT. LONG. END = 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 29 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 45.53N/123.96W LAT. LONG. END= 45.41N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 29 (45.53N/ 123.96W TO 45.41N/ 123.96W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.4	3.3	2.9	2.5	1.9	1.5	1.4	1.4	1.7	2.6	3.4	3.6	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													
MEAN	3.4	3.3	2.9	2.5	1.9	1.5	1.4	1.4	1.7	2.6	3.4	3.6	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 29 (45.53N/ 123.96W TO 45.41N/ 123.96W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	5.3	5.7	5.4	5.5	5.2	5.3	5.7	5.5	5.2	5.4	5.3	5.4	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

20 YR. STATISTICS FOR PACIFIC STATION 29 (45.53N/ 123.96W TO 45.41N/ 123.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90-0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	82.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	73121403
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											3
0.50 - 0.99											17
1.00 - 1.49											408
1.50 - 1.99											408
2.00 - 2.49											389
2.50 - 2.99											22
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	724	115	0	0	0	0	0	0	0	0	492

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 492

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											25
0.50 - 0.99											1346
1.00 - 1.49											408
1.50 - 1.99											408
2.00 - 2.49											333
2.50 - 2.99											279
3.00 - 3.49											118
3.50 - 3.99											51
4.00 - 4.49											11
4.50 - 4.99											0
5.00 +											0
TOTAL	2158	4436	3384	475	159	12	1	0	0	0	6220

MEAN HS(M) = 1.56 LARGEST HS(M) = 4.13 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 6220

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 45.41N/123.96W LAT. LON. END= 45.30N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49											35
0.50 - 0.99											3720
1.00 - 1.49											1425
1.50 - 1.99											1425
2.00 - 2.49											1425
2.50 - 2.99											1425
3.00 - 3.49											1425
3.50 - 3.99											1425
4.00 - 4.49											1425
4.50 - 4.99											1425
5.00 +											1425
TOTAL	108	1614	11073	12699	16213	23036	16188	2399	96	0	49130

MEAN HS(M) = 2.58 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49130

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 45.41N/123.96W LAT. LON. END = 45.30N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	1
0.5-0.99	0	0	0	0	0	0	0	0	0	0	78
1.0-1.49	0	0	0	0	0	0	0	0	0	0	372
1.5-1.99	0	0	0	0	0	0	0	0	0	0	496
2.0-2.49	0	0	0	0	0	0	0	0	0	0	648
2.5-2.99	0	0	0	0	0	0	0	0	0	0	940
3.0-3.49	0	0	0	0	0	0	0	0	0	0	810
3.5-3.99	0	0	0	0	0	0	0	0	0	0	500
4.0-4.49	0	0	0	0	0	0	0	0	0	0	280
4.5-4.99	0	0	0	0	0	0	0	0	0	0	22
5.0+	0	0	0	0	0	0	0	0	0	0	57
TOTAL	44	443	863	768	1193	768	211	6	0	0	

MEAN HS(M) = 2.78 LARGEST HS(M) = 5.83 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2526

PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 45.41N/123.96W LAT. LON. END = 45.30N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	3
0.5-0.99	0	0	0	0	0	0	0	0	0	0	44
1.0-1.49	0	0	0	0	0	0	0	0	0	0	32
1.5-1.99	0	0	0	0	0	0	0	0	0	0	74
2.0-2.49	0	0	0	0	0	0	0	0	0	0	4
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	21	79	17	0	0	0	0	0	0	0	

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 72

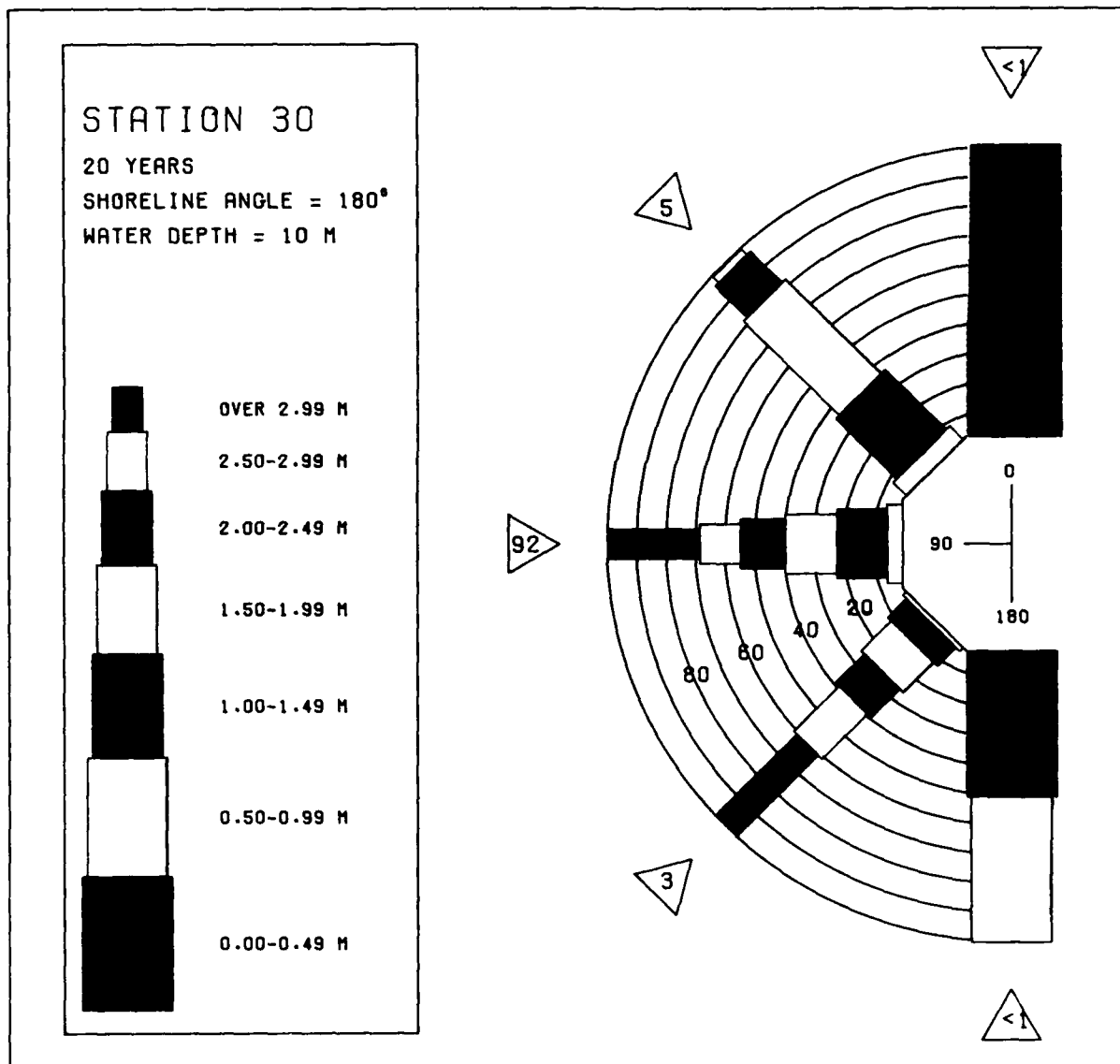
PHASE 3 ST. 30 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 45.41N/123.96W LAT. LON. END = 45.30N/123.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 30 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 45.41N/123.96W LAT. LONG. END= 45.30N/123.96W
SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
5.0	0	2	1	1	6	23	4	1	4	.	.	5
4.5	0	1	2	5	19	33	16	2	.	.	.	513
4.0	0	1	2	7	41	166	37	7	.	.	.	1740
3.5	0	1	1	2	27	155	33	2	.	.	.	1887
3.0	0	1	1	3	47	261	6	1	.	.	.	1515
2.5	0	1	3	4	92	352	183	12	1	.	.	3329
2.0	0	1	5	25	14	60	32	21	1	.	.	1124
1.5	0	1	.	7	3	21	15	28	.	.	.	777
1.0	0	1	.	1	.	6	16	37	.	.	.	501
0.5	0	1	.	.	.	.	15	92	.	.	.	294
TOTAL		303	666	1530	1391	1813	2376	1637	236	7	0	274
MEAN HS(M) = 2.47		LARGEST HS(M) = 7.15			MEAN TP(SEC) = 11.2			TOTAL CASES =			58440	



MONTH

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 30 (45.41N/ 123.96W TO 45.30N/ 123.96W)

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 30 (45.41N/ 123.96W TO 45.30N/ 123.96W)

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 12.5
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 90
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.1
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.2
LARGEST WAVE HS . . . . . (METERS) 2.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 88
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) 73121403

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PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 45.30N/123.96W LAT. LON. END = 45.18N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 45.30N/123.96W LAT. LON. END = 45.18N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	27	.	.	.	.	.	.	.	.	.	27
1.50 - 1.99	130	.	.	.	.	.	.	.	.	.	130
2.00 - 2.49	15	.	.	.	.	.	.	.	.	.	15
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	172	0	0	0	0	0	0	0	0	0	172

MEAN HS(M) = 1.22 LARGEST HS(M) = 1.86 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 101

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 45.30N/123.96W LAT. LON. END = 45.18N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	154	455	280	22	6	5	1	.	.	.	923
1.50 - 1.99	503	1182	1302	154	15	8	.	.	.	.	3584
2.00 - 2.49	1170	846	749	102	18	.	.	.	.	.	2985
2.50 - 2.99	124	734	155	30	3	.	.	.	.	.	1046
3.00 - 3.49	.	174	58	17	.	.	.	.	.	.	249
3.50 - 3.99	.	30	11	5	.	.	.	.	.	.	70
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2359	3523	2593	331	42	13	1	0	0	0	5189

MEAN HS(M) = 1.55 LARGEST HS(M) = 3.93 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 5189

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 45.30N/123.96W LAT. LON. END = 45.18N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	53	580	1255	400	181	70	51	1	46	.	2637
1.50 - 1.99	66	1192	5208	3193	1297	390	95	18	.	.	11459
2.00 - 2.49	37	484	3891	4733	3507	1813	213	59	.	.	14742
2.50 - 2.99	17	203	1091	3196	4635	2838	576	87	11	.	12654
3.00 - 3.49	.	128	272	1013	4163	4478	1295	75	.	.	11432
3.50 - 3.99	.	44	181	480	2257	5427	1972	154	.	.	10520
4.00 - 4.49	.	3	129	171	1018	4140	2619	171	6	.	8256
4.50 - 4.99	.	.	47	88	328	2727	2845	285	.	.	6320
5.00 +	.	.	3	25	123	1067	2455	290	.	.	3963
TOTAL	174	2640	12081	13305	17575	23478	15841	1228	81	0	55449

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51184

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	13	17	.	.	.	.	.	.	.	30
0.50 - 0.99	35	59	95	13	17	.	.	.	.	.	229
1.00 - 1.49	30	58	99	87	190	6	.	.	.	.	540
1.50 - 1.99	3	66	148	73	195	46	.	.	.	.	630
2.00 - 2.49	.	71	159	124	172	199	5	.	.	.	800
2.50 - 2.99	.	3	124	106	147	148	3	1	.	.	550
3.00 - 3.49	.	.	83	92	106	142	30	.	.	.	271
3.50 - 3.99	.	.	22	45	107	63	49	.	.	.	171
4.00 - 4.49	.	.	1	15	46	112	7	.	.	.	114
4.50 - 4.99	.	.	.	.	61	66	.	.	.	.	133
5.00 +	.	.	.	.	12	150	.	.	.	.	162
TOTAL	38	327	748	553	870	616	150	7	0	0	1949

MEAN HS(M) = 3.18 LARGEST HS(M) = 6.71 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 1949

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	1	1	.	.	.	.	.	.	.	.	3
1.50 - 1.99	1	5	.	.	.	.	.	.	.	.	7
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	17	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.79 LARGEST HS(M) = 3.35 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 17

PHASE 3 ST. 31 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.18N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 31 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 45.30N/123.96W LAT. LON. END= 45.16N/123.98W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.4	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	125	104	155	34	13	13	13	13	13	13	13	13
0.50-0.99	125	104	155	34	13	13	13	13	13	13	13	13
1.00-1.49	125	104	155	34	13	13	13	13	13	13	13	13
1.50-1.99	125	104	155	34	13	13	13	13	13	13	13	13
2.00-2.49	125	104	155	34	13	13	13	13	13	13	13	13
2.50-2.99	125	104	155	34	13	13	13	13	13	13	13	13
3.00-3.49	125	104	155	34	13	13	13	13	13	13	13	13
3.50-3.99	125	104	155	34	13	13	13	13	13	13	13	13
4.00-4.49	125	104	155	34	13	13	13	13	13	13	13	13
4.50-4.99	125	104	155	34	13	13	13	13	13	13	13	13
5.00-5.49	125	104	155	34	13	13	13	13	13	13	13	13
5.50-5.99	125	104	155	34	13	13	13	13	13	13	13	13
6.00-6.49	125	104	155	34	13	13	13	13	13	13	13	13
6.50-6.99	125	104	155	34	13	13	13	13	13	13	13	13
7.00-7.49	125	104	155	34	13	13	13	13	13	13	13	13
7.50-7.99	125	104	155	34	13	13	13	13	13	13	13	13
8.00-8.49	125	104	155	34	13	13	13	13	13	13	13	13
8.50-8.99	125	104	155	34	13	13	13	13	13	13	13	13
9.00-9.49	125	104	155	34	13	13	13	13	13	13	13	13
9.50-9.99	125	104	155	34	13	13	13	13	13	13	13	13
10.00-10.49	125	104	155	34	13	13	13	13	13	13	13	13
10.50-10.99	125	104	155	34	13	13	13	13	13	13	13	13
11.00-11.49	125	104	155	34	13	13	13	13	13	13	13	13
11.50-11.99	125	104	155	34	13	13	13	13	13	13	13	13
12.00-12.49	125	104	155	34	13	13	13	13	13	13	13	13
12.50-12.99	125	104	155	34	13	13	13	13	13	13	13	13
13.00-13.49	125	104	155	34	13	13	13	13	13	13	13	13
13.50-13.99	125	104	155	34	13	13	13	13	13	13	13	13
14.00-14.49	125	104	155	34	13	13	13	13	13	13	13	13
14.50-14.99	125	104	155	34	13	13	13	13	13	13	13	13
15.00-15.49	125	104	155	34	13	13	13	13	13	13	13	13
15.50-15.99	125	104	155	34	13	13	13	13	13	13	13	13
16.00-16.49	125	104	155	34	13	13	13	13	13	13	13	13
16.50-16.99	125	104	155	34	13	13	13	13	13	13	13	13
17.00-17.49	125	104	155	34	13	13	13	13	13	13	13	13
17.50-17.99	125	104	155	34	13	13	13	13	13	13	13	13
18.00-18.49	125	104	155	34	13	13	13	13	13	13	13	13
18.50-18.99	125	104	155	34	13	13	13	13	13	13	13	13
19.00-19.49	125	104	155	34	13	13	13	13	13	13	13	13
19.50-19.99	125	104	155	34	13	13	13	13	13	13	13	13
20.00-20.49	125	104	155	34	13	13	13	13	13	13	13	13
20.50-20.99	125	104	155	34	13	13	13	13	13	13	13	13
21.00-21.49	125	104	155	34	13	13	13	13	13	13	13	13
21.50-21.99	125	104	155	34	13	13	13	13	13	13	13	13
22.00-22.49	125	104	155	34	13	13	13	13	13	13	13	13
22.50-22.99	125	104	155	34	13	13	13	13	13	13	13	13
23.00-23.49	125	104	155	34	13	13	13	13	13	13	13	13
23.50-23.99	125	104	155	34	13	13	13	13	13	13	13	13
24.00-24.49	125	104	155	34	13	13	13	13	13	13	13	13
24.50-24.99	125	104	155	34	13	13	13	13	13	13	13	13
25.00-25.49	125	104	155	34	13	13	13	13	13	13	13	13
25.50-25.99	125	104	155	34	13	13	13	13	13	13	13	13
26.00-26.49	125	104	155	34	13	13	13	13	13	13	13	13
26.50-26.99	125	104	155	34	13	13	13	13	13	13	13	13
27.00-27.49	125	104	155	34	13	13	13	13	13	13	13	13
27.50-27.99	125	104	155	34	13	13	13	13	13	13	13	13
28.00-28.49	125	104	155	34	13	13	13	13	13	13	13	13
28.50-28.99	125	104	155	34	13	13	13	13	13	13	13	13
29.00-29.49	125	104	155	34	13	13	13	13	13	13	13	13
29.50-29.99	125	104	155	34	13	13	13	13	13	13	13	13
30.00-30.49	125	104	155	34	13	13	13	13	13	13	13	13
30.50-30.99	125	104	155	34	13	13	13	13	13	13	13	13
31.00-31.49	125	104	155	34	13	13	13	13	13	13	13	13
31.50-31.99	125	104	155	34	13	13	13	13	13	13	13	13
32.00-32.49	125	104	155	34	13	13	13	13	13	13	13	13
32.50-32.99	125	104	155	34	13	13	13	13	13	13	13	13
33.00-33.49	125	104	155	34	13	13	13	13	13	13	13	13
33.50-33.99	125	104	155	34	13	13	13	13	13	13	13	13
34.00-34.49	125	104	155	34	13	13	13	13	13	13	13	13
34.50-34.99	125	104	155	34	13	13	13	13	13	13	13	13
35.00-35.49	125	104	155	34	13	13	13	13	13	13	13	13
35.50-35.99	125	104	155	34	13	13	13	13	13	13	13	13
36.00-36.49	125	104	155	34	13	13	13	13	13	13	13	13
36.50-36.99	125	104	155	34	13	13	13	13	13	13	13	13
37.00-37.49	125	104	155	34	13	13	13	13	13	13	13	13
37.50-37.99	125	104	155	34	13	13	13	13	13	13	13	13
38.00-38.49	125	104	155	34	13	13	13	13	13	13	13	13
38.50-38.99	125	104	155	34	13	13	13	13	13	13	13	13
39.00-39.49	125	104	155	34	13	13	13	13	13	13	13	13
39.50-39.99	125	104	155	34	13	13	13	13	13	13	13	13
40.00-40.49	125	104	155	34	13	13	13	13	13	13	13	13
40.50-40.99	125	104	155	34	13	13	13	13	13	13	13	13
41.00-41.49	125	104	155	34	13	13	13	13	13	13	13	13
41.50-41.99	125	104	155	34	13	13	13	13	13	13	13	13
42.00-42.49	125	104	155	34	13	13	13	13	13	13	13	13
42.50-42.99	125	104	155	34	13	13	13	13	13	13	13	13
43.00-43.49	125	104	155	34	13	13	13	13	13	13	13	13
43.50-43.99	125	104	155	34	13	13	13	13	13	13	13	13
44.00-44.49	125	104	155	34	13	13	13	13	13	13	13	13
44.50-44.99	125	104	155	34	13	13	13	13	13	13	13	13
45.00-45.49	125	104	155	34	13	13	13	13	13	13	13	13
45.50-45.99	125	104	155	34	13	13	13	13	13	13	13	13
46.00-46.49	125	104	155	34	13	13	13	13	13	13	13	13
46.50-46.99	125	104	155	34	13	13	13	13	13	13	13	13
47.00-47.49	125	104	155	34	13	13	13	13	13	13	13	13
47.50-47.99	125	104	155	34	13	13	13	13	13	13	13	13
48.00-48.49	125	104	155	34	13	13	13	13	13	13	13	13
48.50-48.99	125	104	155	34	13	13	13	13	13	13	13	13
49.00-49.49	125	104	155	34	13	13	13	13	13	13	13	13
49.50-49.99	125	104	155	34	13	13	13	13	13	13	13	13
50.00-50.49	125	104	155	34	13	13	13	13	13	13	13	13
50.50-50.99	125	104	155	34	13	13	13	13	13	13	13	13
51.00-51.49	125	104	155	34	13	13	13	13	13	13	13	13
51.50-51.99	125	104	155	34	13	13	13	13	13	13	13	13
52.00-52.49	125	104	155	34	13	13	13	13	13	13	13	13
52.50-52.99	125	104	155	34	13	13	13	13	13	13	13	13
53.00-53.49	125	104	155	34	13	13	13	13	13	13	13	13
53.50-53.99	125	104	155	34	13	13	13	13	13	13	13	13
54.00-54.49	125	104	155	34	13	13	13	13	13	13	13	13
54.50-54.99	125	104	155	34	13	13	13	13	13	13	13	13
55.00-55.49	125	104	155	34	13	13	13	13	13			

MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													MEAN
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1972	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1973	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1975	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEAN	3.8	3.7	3.2	2.7	2.0	1.7	1.5	1.4	1.8	2.8	3.7	4.1	

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 31 (45.30N/ 123.96W TO 45.18N/ 123.98W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	3.3
LARGEST TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0.49										0
0.50	-	0.99										0
1.00	-	1.49										0
1.50	-	1.99										0
2.00	-	2.49										0
2.50	-	2.99										0
3.00	-	3.49										0
3.50	-	3.99										0
4.00	-	4.49										0
4.50	-	4.99										0
5.00	+											0
TOTAL		0	0	0	0	0	0	0	0	0		
MEAN HS(M) = 0.		LARGEST HS(M) = 0.		MEAN TP(SEC) = 0.		NUMBER OF CASES =						

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49	0	0	0	0	0	0	0	0	0	0	0
0.50	18	0	0	0	0	0	0	0	0	0	18
1.00	71	0	0	0	0	0	0	0	0	0	71
1.50	42	0	0	0	0	0	0	0	0	0	42
2.00	3	0	0	0	0	0	0	0	0	0	3
2.50	0	0	0	0	0	0	0	0	0	0	0
3.00	0	0	0	0	0	0	0	0	0	0	0
3.50	0	0	0	0	0	0	0	0	0	0	0
4.00	0	0	0	0	0	0	0	0	0	0	0
4.50	0	0	0	0	0	0	0	0	0	0	0
5.00	0	0	0	0	0	0	0	0	0	0	0
TOTAL	134	0	0	0	0	0	0	0	0	0	134
MEAN HS(M) = 1.37	LARGEST HS(M) = 2.16		MEAN TP(SEC) = 5.0		NUMBER OF CASES =		80				

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-	0											3
0.1-	0											1
0.5-	1											1
1.0-	1											1
1.5-	1											1
2.0-	2											2
2.5-	2											2
3.0-	3											3
3.5-	3											3
4.0-	4											4
4.5-	4											4
5.0-	5											5
5.5-	5											5
6.0-	6											6
TOTAL		2645	1820	181	26	1	0	0	0	0	0	2739
MEAN HS(M) = 1.77		LARGEST HS(M) = 3.77		MEAN TP(SEC) = 6.1		NUMBER OF CASES = 2739						

[illegible]

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 45.18N/123.98W LAT. LONG. END= 45.06N/124.01W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	23	128	53								204
1.00 - 1.49	11	179	219	41	11						461
1.50 - 1.99	34	160	256	189	130						775
2.00 - 2.49	3	85	174	254	272	6					878
2.50 - 2.99		68	188	231	326	155	3				940
3.00 - 3.49		11	148	154	326	256	10	1			960
3.50 - 3.99			73	80	179	308	53	1			695
4.00 - 4.49			17	32	135	181	78	3			446
4.50 - 4.99			1	13	70	106	71	5			266
5.00 +				3	34	77	82	1			197
TOTAL	71	632	1129	997	1444	1176	362	11	0	0	

MEAN HS(M) = 2.85 LARGEST HS(M) = 6.38 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 3418

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 45.18N/123.98W LAT. LONG. END= 45.06N/124.01W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 0.99	1	11									12
1.00 - 1.49	10	18									28
1.50 - 1.99	6	15	1								22
2.00 - 2.49		3									3
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	17	57	1	0	0	0	0	0	0	0	

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 47

PHASE 3 ST. 32 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 45.18N/123.98W LAT. LONG. END= 45.06N/124.01W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

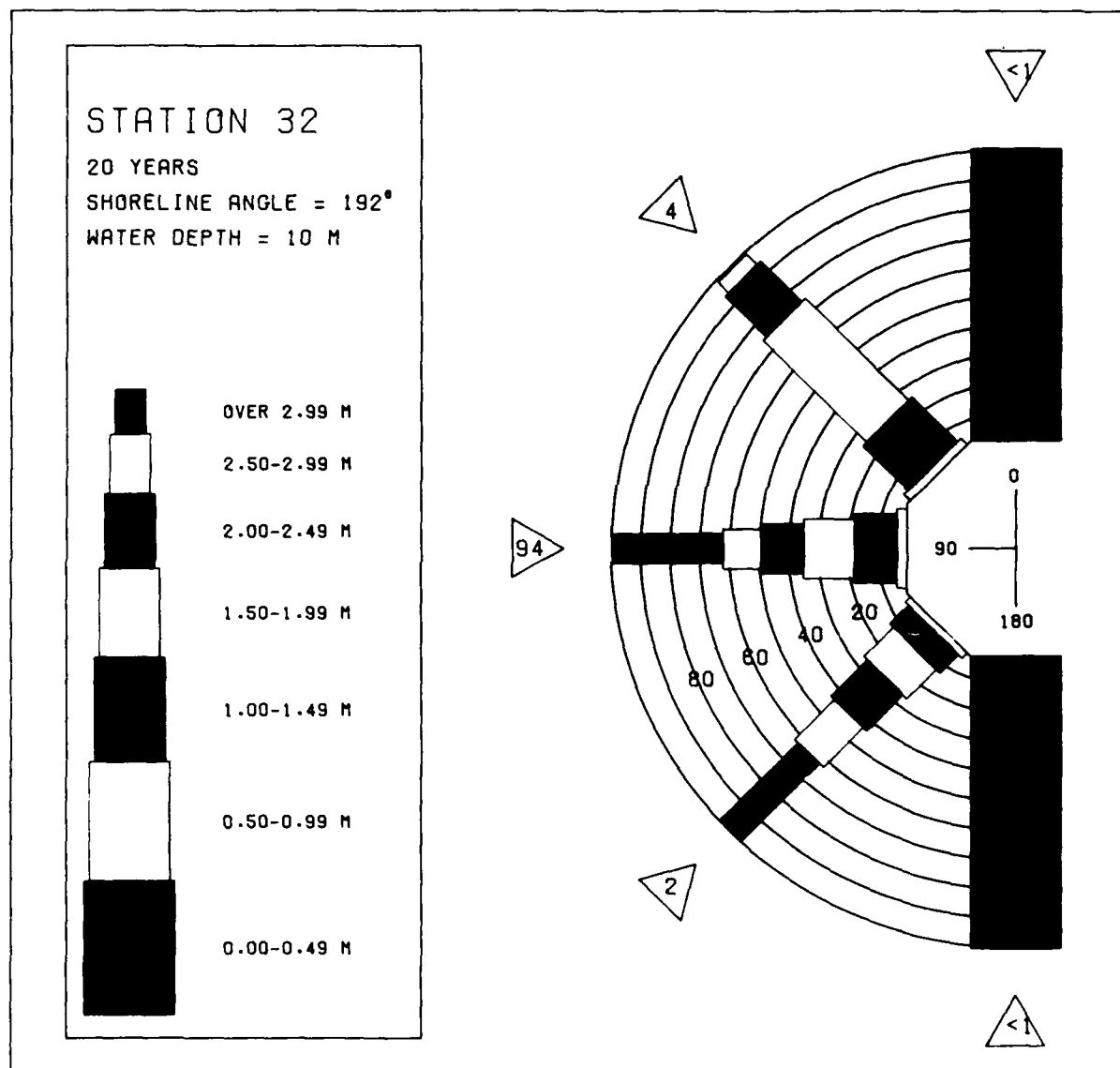
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1										1
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.47 LARGEST HS(M) = 0.47 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 32 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LOH. START= 45.18N/123.98W LAT. LOH. END= 45.06N/124.01W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3-LONGER	TOTAL
0. - 0.49	22	97	144	35	17	7	5	1	4	1	1	1
0.50 - 0.99	94	233	333	324	123	36	9	1	1	1	1	1
1.00 - 1.49	176	144	478	477	328	175	20	1	1	1	1	1
1.50 - 1.99	28	111	142	351	479	287	60	1	1	1	1	1
2.00 - 2.49	1	47	45	120	448	553	128	1	1	1	1	1
2.50 - 2.99	1	9	32	54	249	556	307	15	1	1	1	1
3.00 - 3.49	1	1	16	21	110	439	371	18	1	1	1	1
3.50 - 3.99	1	1	6	9	37	284	360	24	1	1	1	1
4.00 - 4.49	1	1	1	2	15	115	354	12	1	1	1	1
4.50 - 4.99	1	1	1	1	7	47	369	24	1	1	1	1
5.00 +	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL	320	641	1496	1393	1833	2419	1613	237	6	0	0	58440

MEAN HS(M) = 2.69 LARGEST HS(M) = 7.28 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 32 (45.18N/ 123.98W TO 45.06N/ 124.01W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1975	3.8	3.6	3.2	2.7	2.0	1.7	1.6	1.5	1.8	2.8	3.7	4.0

MEAN
1.7
1.6
1.5
1.8
2.8
3.7
4.0

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 32 (45.18N/ 123.98W TO 45.06N/ 124.01W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1975	6.0	6.0	5.1	5.7	5.4	5.9	5.1	5.2	5.7	5.4	5.5	5.7

20 YR. STATISTICS FOR PACIFIC STATION 32 (45.18N/ 123.98W TO 45.06N/ 124.01W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	9.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.0
LARGEST WAVE HS	(METERS)	5.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	8.4
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	88
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	
0.50-0.99	0	
1.00-1.49	0	
1.50-1.99	0	
2.00-2.49	0	
2.50-2.99	0	
3.00-3.49	0	
3.50-3.99	0	
4.00-4.49	0	
4.50-4.99	0	
5.00+	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0 LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	0
0.50-0.99	29	.	.	.	.	.	.	.	.	29
1.00-1.49	290	.	.	.	.	.	.	.	.	290
1.50-1.99	22	23	.	.	.	.	.	.	.	314
2.00-2.49	.	6	.	.	.	.	.	.	.	28
2.50-2.99	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	0
TOTAL	611	29	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.52 LARGEST HS(M) = 2.50 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 376

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	5	.	1	.	.	.	.	.	.	6
0.50-0.99	135	316	148	10	8	3	1	.	.	621	
1.00-1.49	657	891	537	88	10	6	.	.	.	2189	
1.50-1.99	1281	836	188	44	10	.	.	.	.	2359
2.00-2.49	195	797	114	5	1	.	.	.	.	1107
2.50-2.99	.	224	47	3	.	.	.	.	.	276
3.00-3.49	.	27	37	.	.	.	.	.	.	67
3.50-3.99	.	1	6	.	.	.	.	.	.	7
4.00-4.49	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	0
TOTAL	2273	3092	1078	150	29	9	1	0	0	0	

MEAN HS(M) = 1.64 LARGEST HS(M) = 3.80 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 3885

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	14
0.50-0.99	63	643	1327	371	172	68	51	.	46	2742	
1.00-1.49	73	1368	5751	3174	1262	383	92	.	.	12742	
1.50-1.99	58	532	4418	4642	4548	1772	208	56	.	15150	
2.00-2.49	13	213	1168	3324	4548	2025	562	82	10	11745	
2.50-2.99	.	136	260	1847	4226	4421	1291	78	10	11464	
3.00-3.49	.	46	181	473	2304	5462	1962	150	5	10583	
3.50-3.99	.	1	126	159	995	4151	2647	165	6	8350	
4.00-4.49	.	.	46	78	309	2751	2854	287	.	6325	
4.50-4.99	.	.	1	23	111	1081	2443	306	1	3666	
5.00+	.	.	.	3	58	503	3766	1228	.	5558	
TOTAL	207	2947	13283	13295	17444	23417	15876	2370	83	0	

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51989

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	32	20	.	.	.	.	.	.	.	52
1.00 - 1.49	10	107	109	15	.	.	.	.	.	.	241
1.50 - 1.99	29	87	126	92	23	.	.	.	.	.	357
2.00 - 2.49	3	59	160	119	114	17	.	.	.	.	472
2.50 - 2.99	.	70	157	135	215	59	5	.	.	.	641
3.00 - 3.49	.	15	114	114	177	126	11	1	.	.	572
3.50 - 3.99	.	3	78	94	179	186	41	.	.	.	581
4.00 - 4.49	.	.	23	44	119	131	29	.	.	.	346
4.50 - 4.99	.	.	.	10	90	80	30	1	.	.	211
5.00 +	.	.	.	1	47	104	58	5	.	.	215
TOTAL	42	373	801	624	964	703	174	7	0	0	

MEAN HS(M) = 3.11 LARGEST HS(M) = 6.69 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2171

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	3	.	.	.	.	.	.	.	.	8
1.50 - 1.99	3	10	.	.	.	.	.	.	.	.	13
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9	20	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.78 LARGEST HS(M) = 3.20 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 19

PHASE 3 ST. 33 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 45.06N/124.01W LAT. LON. END= 44.93N/124.03W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

WIS STATION 33 (45.06N/ 124.01W TO 44.93N/ 124.03W)

[illegible]

WIS STATION 33 (45.06N/ 124.01W TO 44.93N/ 124.03W)

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 33 (45.06N/ 124.01W TO 44.93N/ 124.03W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	85.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102406

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 1.49											0
1.50 - 2.49											0
2.50 - 3.49											0
3.50 - 4.49											0
4.50 - 5.00											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 1.49	17										17
1.50 - 2.49	172										172
2.50 - 3.49	200	17									217
3.50 - 4.49		13									13
4.50 - 5.00											0
TOTAL	389	30	0	0	0	0	0	0	0	0	419

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 246

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 1.49	11	71	37	13							122
1.50 - 2.49	653	304	39	1							1007
2.50 - 3.49	1675	675	32								2382
3.50 - 4.49	154	944	15								1113
4.50 - 5.00		27	15								42
TOTAL	2599	2236	152	18	0	0	0	0	0	0	2932

MEAN HS(M) = 1.77 LARGEST HS(M) = 3.50 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 2932

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49											0
0.50 - 1.49	58	573	1254	323	95	59	42		30		2434
1.50 - 2.49	112	1610	5470	2951	1175	331	71	15	5		11740
2.50 - 3.49	100	4324	4659	4659	3206	1536	201	49	1		14755
3.50 - 4.49	30	342	1185	3437	4527	2727	520	73	10		12851
4.50 - 5.00		145	112	112	4291	4216	1235	68	13		11324
		66	104	345	2224	5426	1858	160	5		10198
		1	104	119	1023	4488	2814	176	6		8731
			35	68	235	2780	2842	280	1		6231
			3	6	92	1141	2583	314			4139
				1	27	453	4344	1444	5		6274
TOTAL	300	3421	12731	13021	16865	23160	16520	2579	76	0	51858

MEAN HS(M) = 2.82 LARGEST HS(M) = 7.21 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51858

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	25	119	47	.	.	.	.	.	.	.	191
0.5-0.99	11	136	263	32	17	.	.	.	.	.	459
1.0-1.49	39	121	282	198	126	13	.	.	.	.	779
1.5-1.99	3	85	183	244	301	170	17	.	.	.	870
2.0-2.49	.	61	186	207	301	162	17	.	.	.	934
2.5-2.99	.	.	130	145	308	263	63	.	.	.	917
3.0-3.49	.	3	70	82	212	266	73	.	.	.	706
3.5-3.99	.	.	11	27	114	196	77	6	.	.	431
4.0-4.49	.	.	.	18	66	85	71	5	.	.	245
4.5-4.99	.	.	.	1	15	80	77	.	.	.	173
5.0-5.49	.	.	.	.	.	.	.	.	.	.	.
5.5-5.99	.	.	.	.	.	.	.	.	.	.	.
6.0-6.49	.	.	.	.	.	.	.	.	.	.	.
TOTAL	78	533	1172	954	1443	1135	379	11	0	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.52 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 3349

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	23	.	.	.	.	.	.	.	.	14
0.5-0.99	10	20	.	.	.	.	.	.	.	.	230
1.0-1.49	1	20	3	.	.	.	.	.	.	.	230
1.5-1.99	.	.	.	.	.	.	.	.	.	.	0
2.0-2.49	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	0
6.0-6.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	69	4	0	0	0	0	0	0	0	

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.27 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 54

PHASE 3 ST. 34 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 44.93N/124.03W LAT. LON. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

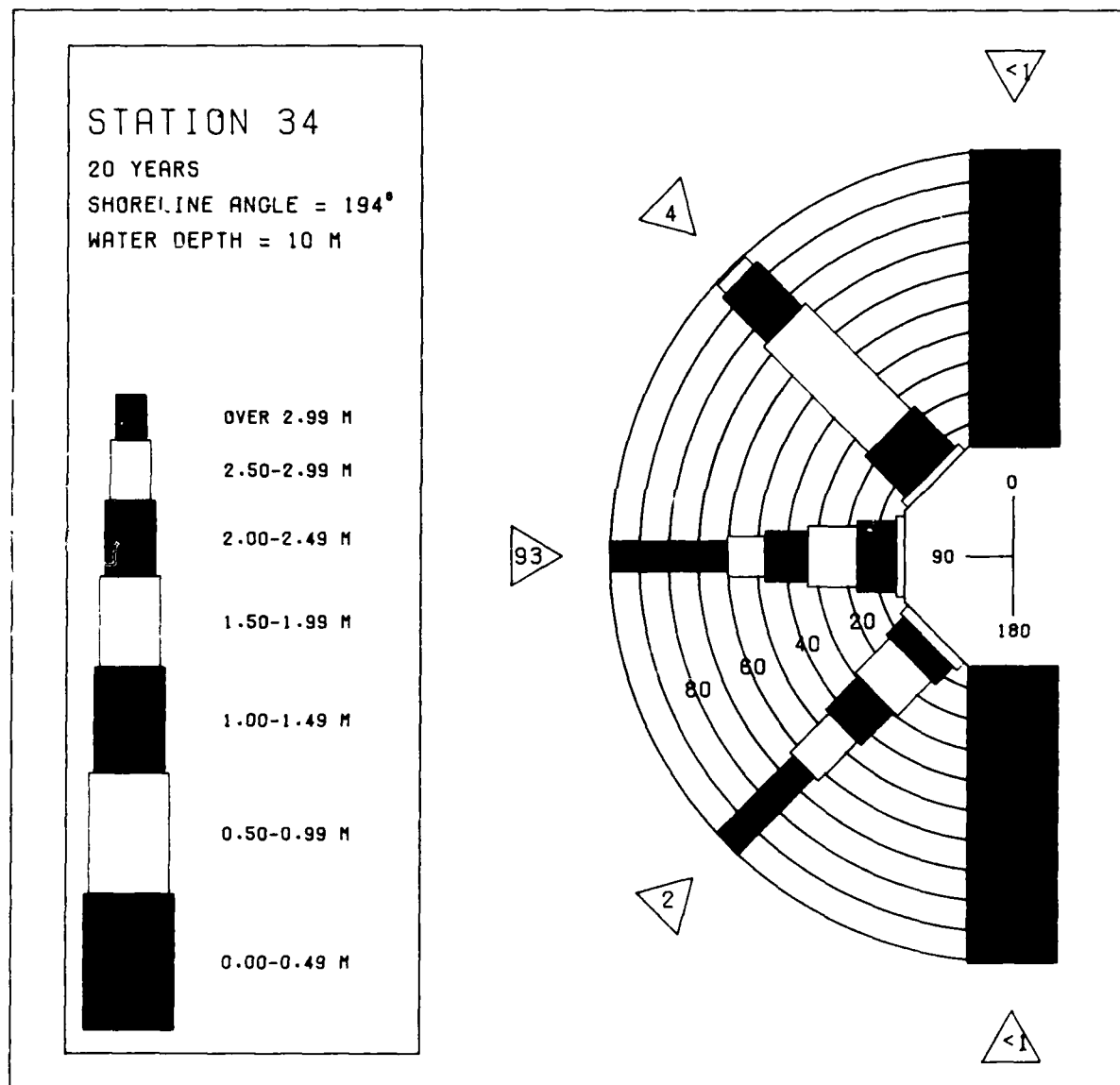
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	.	.	.	.	.	.	.	.	.	1
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 0.49 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 34 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 44.93N/124.03W LAT. LONG. END= 44.83N/124.08W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.4	13.5-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	21	78	133	32	0	5	4	1	3	1	28
0.50-0.99	96	207	577	299	119	333	7	1	1	1	133
1.00-1.49	201	151	464	265	481	279	20	4	1	1	483
1.50-1.99	18	139	138	368	279	155	53	7	1	1	483
2.00-2.49	..	42	44	131	459	337	135	6	1	1	440
2.50-2.99	..	10	24	43	253	568	193	16	1	1	663
3.00-3.49	..	..	17	20	123	475	308	17	..	..	640
3.50-3.99	..	..	4	9	34	297	291	38	..	..	663
4.00-4.49	..	..	..	2	15	122	265	31	..	..	435
4.50-4.99	..	..	..	..	4	53	442	144	..	..	643
5.00+	..	..	..	..	..	..	..	..	..	..	..
TOTAL	336	627	1402	1395	1830	2424	1687	254	5	0	58440

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.21 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 34 (44.93N/ 124.03W TO 44.83N/ 124.08W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1955	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1956	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1957	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1958	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1959	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1960	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1961	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1962	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1963	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1964	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1965	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1966	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1967	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1968	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1969	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1970	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1971	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1972	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1973	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1974	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
1975	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1
MEAN	3.8	3.7	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.9	3.7	4.1

MEAN
1955 3.8
1956 3.7
1957 3.3
1958 2.8
1959 2.1
1960 1.8
1961 1.6
1962 1.5
1963 1.8
1964 2.9
1965 3.7
1966 4.1

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 34 (44.93N/ 124.03W TO 44.83N/ 124.08W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1955	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1956	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1957	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1958	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1959	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1960	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1961	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1962	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1963	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1964	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1965	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1966	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1967	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1968	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1969	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1970	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1971	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1972	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1973	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1974	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1975	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1

20 YR. STATISTICS FOR PACIFIC STATION 34 (44.93N/ 124.03W TO 44.83N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.2
MEAN PEAK WAVE PERIOD	(SECONDS)	9.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90-100
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.9
LARGEST WAVE HS	(METERS)	4.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	90
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63102409

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	5
0.50 - 0.99	46	.	.	.	.	.	.	.	.	.	46
1.00 - 1.49	592	8	.	.	.	.	.	.	.	.	600
1.50 - 1.99	460	164	.	.	.	.	.	.	.	.	624
2.00 - 2.49	.	30	.	.	.	.	.	.	.	.	30
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1103	203	0	0	0	0	0	0	0	0	765

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.58 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 765

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	2
0.50 - 0.99	133	395	1	22	1	1	.	.	.	.	881
1.00 - 1.49	482	1168	1507	239	41	17	.	.	.	.	3454
1.50 - 1.99	1042	1078	891	157	17	1	.	.	.	.	3186
2.00 - 2.49	53	819	208	71	3	.	.	.	.	.	1154
2.50 - 2.99	.	171	32	46	.	.	.	.	.	.	249
3.00 - 3.49	.	30	39	11	18	.	.	.	.	.	98
3.50 - 3.99	.	.	5	1	20	.	.	.	.	.	51
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	5
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1710	3661	3041	548	100	19	1	0	0	0	5317

MEAN HS(M) = 1.59 LARGEST HS(M) = 4.07 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5317

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 44.83N/124.08W LAT. LON. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	16
0.50 - 0.99	39	431	1045	359	100	70	41	.	34	.	2119
1.00 - 1.49	443	908	4431	2907	1214	325	182	.	1	.	9929
1.50 - 1.99	358	458	3680	4662	3336	1640	189	15	5	.	14056
2.00 - 2.49	15	177	992	3436	4714	2754	518	78	5	.	12692
2.50 - 2.99	.	94	266	1040	4260	4283	1196	66	11	.	11316
3.00 - 3.49	.	47	133	444	2250	5410	1895	174	56	.	10359
3.50 - 3.99	.	3	123	154	1131	4416	2765	159	1	.	8756
4.00 - 4.49	.	.	47	102	319	2828	2808	344	1	.	6449
4.50 - 4.99	.	.	1	23	142	1187	2600	319	.	.	4272
5.00 +	.	.	.	6	51	571	4479	1406	5	.	6518
TOTAL	135	2123	10726	13133	17517	23547	16573	2552	76	0	

MEAN HS(M) = 2.89 LARGEST HS(M) = 7.31 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 50506

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 44.83N/124.08W LAT. LONG. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	6	17	15	8	0	0	0	0	0	0	33
1.0-1.49	5	66	80	63	5	8	0	0	0	0	159
1.5-1.99	30	58	65	65	168	83	0	0	0	0	251
2.0-2.49	5	61	119	112	160	157	0	0	0	0	326
2.5-2.99	0	83	164	116	152	126	5	0	0	0	564
3.0-3.49	0	11	143	90	130	157	25	0	0	0	514
3.5-3.99	0	3	22	53	130	157	25	0	0	0	490
4.0-4.49	0	0	18	17	24	56	46	0	0	0	383
4.5-4.99	0	0	0	0	29	102	34	5	0	0	213
5.0+	0	0	0	0	0	0	0	0	0	0	171
TOTAL	46	299	716	525	800	571	147	5	0	0	

MEAN HS(M) = 3.23 LARGEST HS(M) = 6.95 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1830

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 44.83N/124.08W LAT. LONG. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	1	0	0	0	0	0	0	0	0	0	1
1.0-1.49	5	0	0	0	0	0	0	0	0	0	5
1.5-1.99	8	11	0	0	0	0	0	0	0	0	19
2.0-2.49	0	5	0	0	0	0	0	0	0	0	5
2.5-2.99	0	3	0	0	0	0	0	0	0	0	3
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	15	19	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.71 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 22

PHASE 3 ST. 35 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 44.83N/124.08W LAT. LONG. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

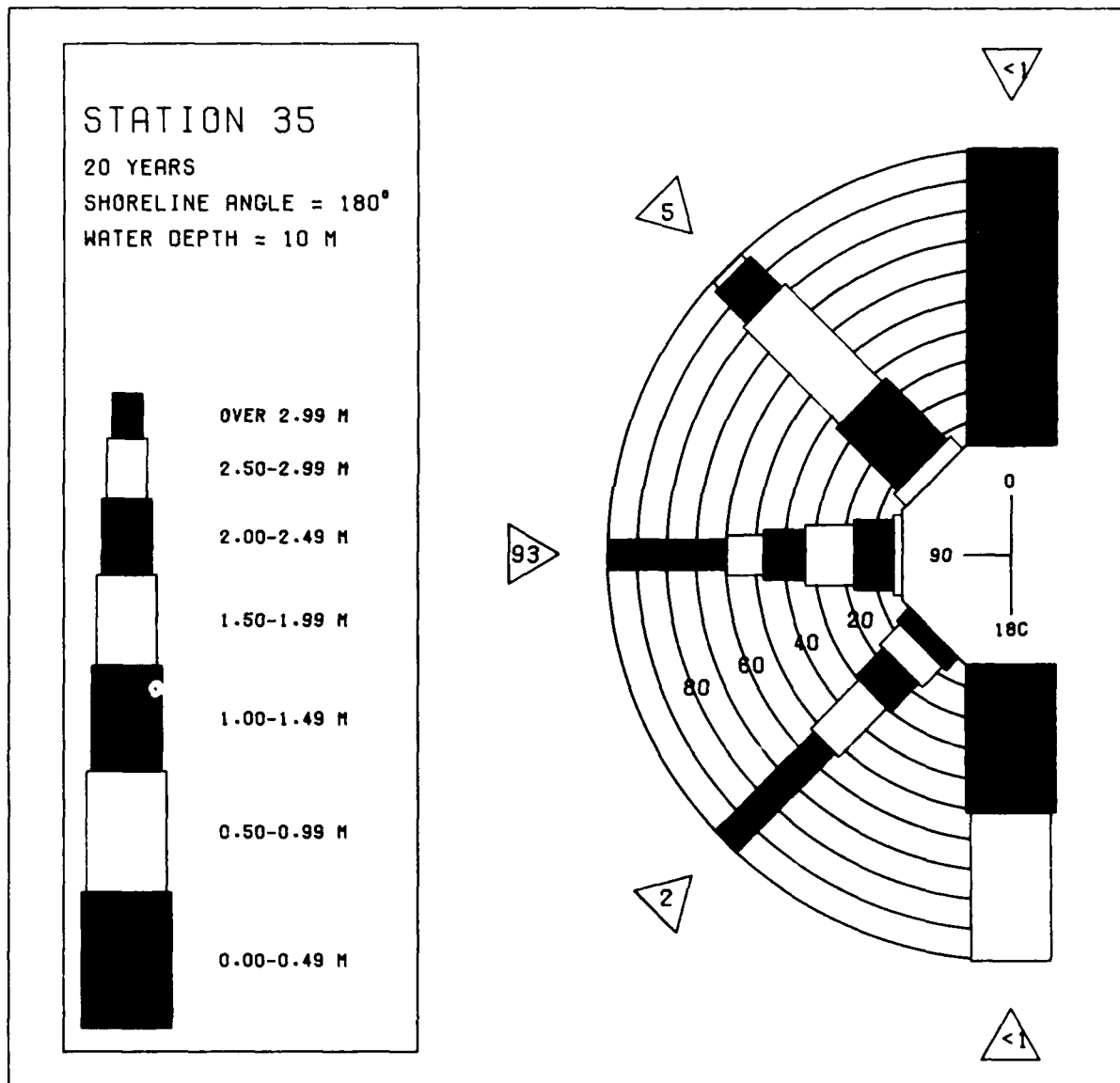
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 35 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 44.83N/124.05W LAT. LON. END= 44.70N/124.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.00-0.49	22	84	138	38	10	7	4	.	3	.	306
0.50-0.99	113	215	601	315	135	34	18	.	.	.	1412
1.00-1.49	157	177	460	488	478	276	151	57	.	.	1810
1.50-1.99	.	109	132	357	442	276	151	.	.	.	1417
2.00-2.49	.	35	16	150	242	32	119	16	1	.	924
2.50-2.99	.	.	3	24	130	54	190	17	.	.	826
3.00-3.49	.	.	.	15	45	54	280	15	.	.	682
3.50-3.99	.	.	.	4	12	30	283	31	.	.	486
4.00-4.49	.	.	.	.	67	124	264	31	.	.	667
4.50-4.99	.	.	.	.	8	23	451	141	.	.	667
5.00+	.	.	.	.	.	.	.	.	.	.	.
TOTAL	299	629	1445	1417	1838	2411	1668	251	4	0	58440

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.31 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 35 (44.83N/ 124.08W TO 44.70N/ 124.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1955	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1956	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1957	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1958	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1959	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1960	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1961	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1962	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1963	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1964	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1965	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1966	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1967	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1968	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1969	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1970	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1971	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1972	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1973	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1974	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
1975	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.5
MEAN	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 35 (44.83N/ 124.08W TO 44.70N/ 124.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1955	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1956	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1957	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1958	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1959	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1960	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1961	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1962	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1963	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1964	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1965	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1966	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1967	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1968	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1969	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1970	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1971	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1972	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1973	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1974	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2
1975	4.2	4.2	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2

20 YR. STATISTICS FOR PACIFIC STATION 35 (44.83N/ 124.08W TO 44.70N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.3
LARGEST WAVE HS	(METERS)	16.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	97.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	41	.	.	.	.	.	.	.	.	.	41
1.00 - 1.49	537	.	.	.	.	.	.	.	.	.	537
1.50 - 1.99	429	143	.	.	.	.	.	.	.	.	571
2.00 - 2.49	.	23	.	.	.	.	.	.	.	.	23
2.50 - 2.99	.	1	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1010	171	0	0	0	0	0	0	0	0	692

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.59 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 692

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	132	359	275	18	1	1	.	.	.	.	791
1.00 - 1.49	521	1095	1216	189	23	17	.	.	.	.	3041
1.50 - 1.99	1122	1066	1228	107	13	.	.	.	.	.	3036
2.00 - 2.49	56	850	185	17	1	.	.	.	.	.	1089
2.50 - 2.99	.	171	37	20	.	.	.	.	.	.	218
3.00 - 3.49	.	27	11	1	.	.	.	.	.	.	40
3.50 - 3.99	.	.	5	.	13	.	.	.	.	.	24
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1836	3568	2465	353	56	18	1	0	0	0	4861

MEAN HS(M) = 1.59 LARGEST HS(M) = 4.08 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 4861

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	5	8	.	.	3	.	.	.	.	16
0.50 - 0.99	39	450	1088	352	102	68	41	.	34	.	2174
1.00 - 1.49	47	975	4693	2939	3316	319	60	15	1	.	10285
1.50 - 1.99	39	473	3832	4693	3316	1629	191	47	5	.	14225
2.00 - 2.49	15	174	1045	3511	4700	2754	515	78	8	.	12800
2.50 - 2.99	.	97	268	1083	4265	4257	1196	68	11	.	11345
3.00 - 3.49	.	49	124	450	2287	5419	1889	172	6	.	10396
3.50 - 3.99	.	3	138	152	1143	4433	2761	159	5	.	8794
4.00 - 4.49	.	.	46	95	321	2893	2825	282	1	.	6463
4.50 - 4.99	.	.	1	20	138	1189	2583	318	.	.	4249
5.00 +	.	.	.	5	46	566	4503	1413	5	.	6538
TOTAL	140	2226	11243	13300	17534	23530	16584	2552	76	0	50974

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 50974

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	46	316	732	536	822	601	155	5	0	0	1893

MEAN HS(M) = 3.21 LARGEST HS(M) = 6.91 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 1893

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13	17	0	0	0	0	0	0	0	0	20

MEAN HS(M) = 1.61 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 20

PHASE 3 ST. 36 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 44.70N/124.08W LAT. LON. END= 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

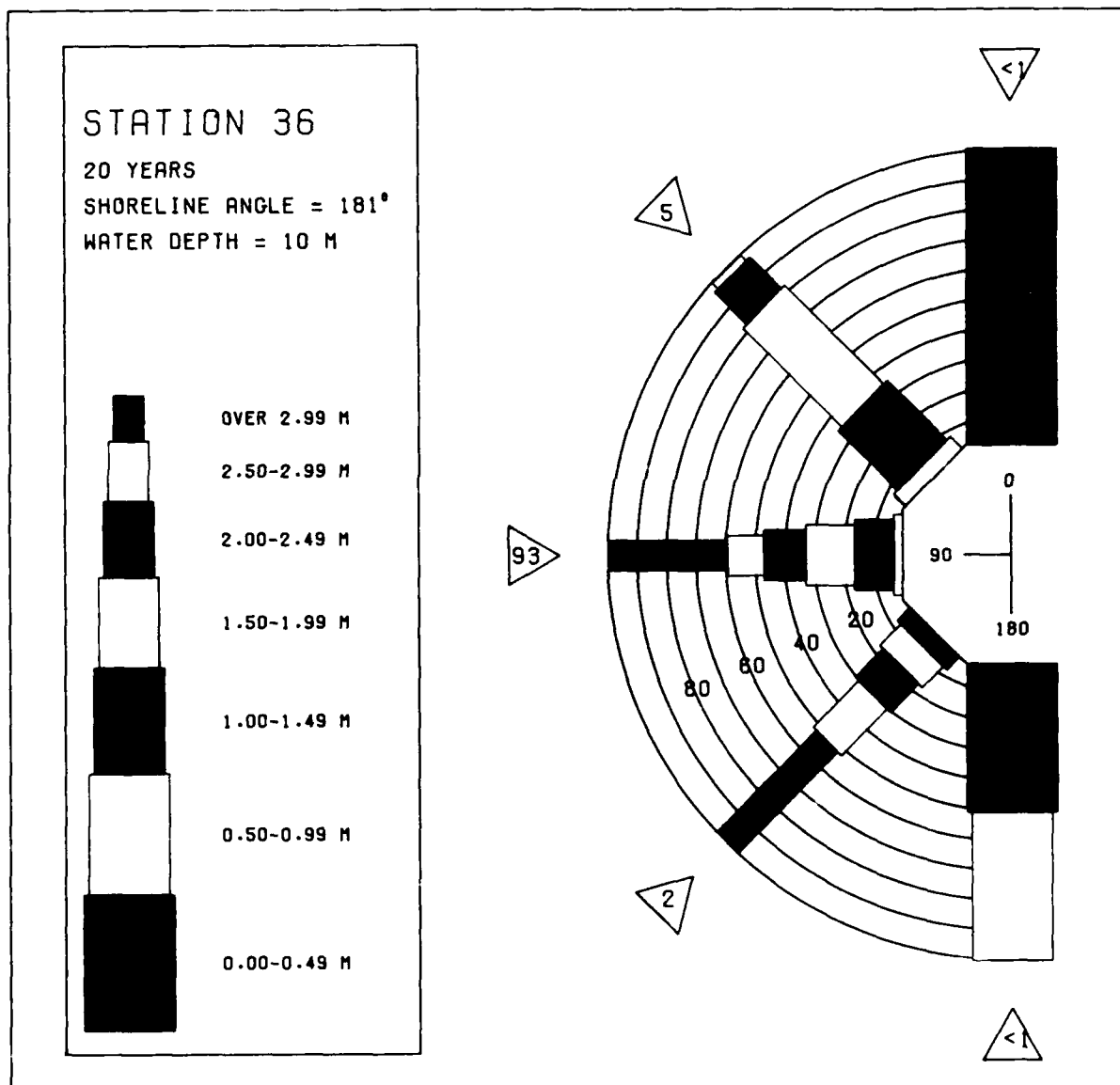
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 36 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 44.70N/124.08W LAT. LON. END = 44.58N/124.08W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)											TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER		
0.0-0.49	22	83	137	37	10	7	4	.	.	.	1	
0.5-0.99	11	21	59	31	12	3	8	.	.	.	30	
1.0-1.49	16	11	46	48	34	16	1	1	.	.	140	
1.5-1.99	7	11	13	36	47	27	19	4	.	.	181	
2.0-2.49	.	8	14	12	43	30	51	7	.	.	142	
2.5-2.99	.	.	31	56	24	55	18	6	1	.	220	
3.0-3.49	.	.	22	24	46	45	89	17	.	.	109	
3.5-3.99	.	.	7	14	13	30	28	15	.	.	93	
4.0-4.49	.	.	.	3	44	45	26	28	.	.	68	
4.5-4.99	.	.	.	.	23	12	45	31	.	.	44
5.0-5.49	.	.	.	.	7	6	14	14	.	.	66
5.5-5.99	.	.	.	.	.	.	.	.	.	.	68
TOTAL	303	625	1441	1415	1839	2411	1671	250	4	0	58440	
MEAN HS(M) = 2.76	LARGEST HS(M) = 7.27				MEAN TP(SEC) = 11.2				TOTAL CASES =		58440	

MEAN HS(M) = 2.76 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 36 (44.70N/ 124.08W TO 44.58N/ 124.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1957	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1958	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1959	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1960	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1961	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1962	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1963	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1964	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1965	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1966	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1967	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1968	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1969	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1970	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1971	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1972	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1973	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1974	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
1975	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0
MEAN	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	3.0

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 36 (44.70N/ 124.08W TO 44.58N/ 124.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1957	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1958	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1959	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1960	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1961	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1962	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1963	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1964	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1965	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1966	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1967	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1968	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1969	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1970	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1971	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1972	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1973	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1974	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1975	6.3	5.1	6.0	6.0	6.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1

20 YR. STATISTICS FOR PACIFIC STATION 36 (44.70N/ 124.08W TO 44.58N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	3.0
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	14.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LONG. START= 44.58N/124.08W LAT. LONG. END= 44.46N/124.08W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 44.58N/124.08W LAT. LONG. END= 44.46N/124.08W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	1
0.50-0.99	35	.	.	.	.	.	.	.	.	.	35
1.00-1.49	414	1	.	.	.	.	.	.	.	.	415
1.50-1.99	364	87	.	.	.	.	.	.	.	.	451
2.00-2.49	1	18	.	.	.	.	.	.	.	.	19
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	815	106	0	0	0	0	0	0	0	0	921

MEAN HS(M) = 1.49 LARGEST HS(M) = 2.41 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 541

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 44.58N/124.08W LAT. LONG. END= 44.46N/124.08W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	.	.	.	.	.	.	.	.	.	3
0.50-0.99	135	258	173	13	.	1	1	.	.	.	580
1.00-1.49	597	617	535	90	10	6	.	.	.	.	2355
1.50-1.99	1286	665	205	37	8	.	.	.	.	.	2501
2.00-2.49	77	913	54	.	.	.	.	.	.	.	1044
2.50-2.99	.	189	20	8	.	.	.	.	.	.	217
3.00-3.49	.	25	3	.	.	.	.	.	.	.	28
3.50-3.99	.	.	8	.	.	.	.	.	.	.	8
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2096	3267	1018	149	18	7	1	0	0	0	3841

MEAN HS(M) = 1.63 LARGEST HS(M) = 3.85 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 3841

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 44.58N/124.08W LAT. LONG. END= 44.46N/124.08W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	16
0.50-0.99	46	521	1175	340	99	65	41	.	34	.	2321
1.00-1.49	61	1115	5278	2977	1214	321	178	13	1	.	11058
1.50-1.99	54	542	4325	4741	3292	1591	191	49	3	.	14788
2.00-2.49	11	177	1189	3530	4574	2736	513	78	10	.	12918
2.50-2.99	.	97	1103	444	4301	4233	1192	66	11	.	11271
3.00-3.49	.	51	1233	444	2303	5424	1860	164	6	.	10375
3.50-3.99	.	3	128	140	1137	4490	2784	164	5	.	8851
4.00-4.49	.	.	42	87	306	2871	2833	275	1	.	6415
4.50-4.99	.	.	3	22	126	1206	2560	321	.	.	4268
5.00+	.	.	.	1	34	552	4515	1428	5	.	6535
TOTAL	172	2511	12539	13385	17486	23492	16597	2558	76	0	51928

MEAN HS(M) = 2.85 LARGEST HS(M) = 7.24 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51928

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6-11.7 11.8-13.3 13.4-15.3 15.4-18.1 18.2-22.2 22.3- LONGER	TOTAL
0.0 - 0.49	6	30	18	10	.	0
0.50 - 0.99	6	30	18	10	.	54
1.00 - 1.49	35	83	143	109	.	250
1.50 - 1.99	3	70	155	131	.	259
2.00 - 2.49	.	83	150	101	.	300
2.50 - 2.99	.	13	150	123	.	300
3.00 - 3.49	.	.	11	135	.	300
3.50 - 3.99	.	.	17	143	.	300
4.00 - 4.49	.	.	.	161	.	300
4.50 - 4.99	.	.	.	104	.	300
5.00 +	.	.	.	39	.	187
TOTAL	47	362	784	606	917	2106

MEAN HS(M) = 3.13 LARGEST HS(M) = 6.81 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2106

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6-11.7 11.8-13.3 13.4-15.3 15.4-18.1 18.2-22.2 22.3- LONGER	TOTAL
0.0 - 0.49	1	.	.	.	.	1
0.50 - 0.99	1	.	.	.	.	1
1.00 - 1.49	9	18	.	.	.	23
1.50 - 1.99	.	3	1	.	.	4
2.00 - 2.49	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	0
5.00 +	.	.	.	.	.	0
TOTAL	13	22	1	0	0	36

MEAN HS(M) = 1.61 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 24

PHASE 3 ST. 37 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 44.58N/124.08W LAT. LON. END= 44.46N/124.08W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

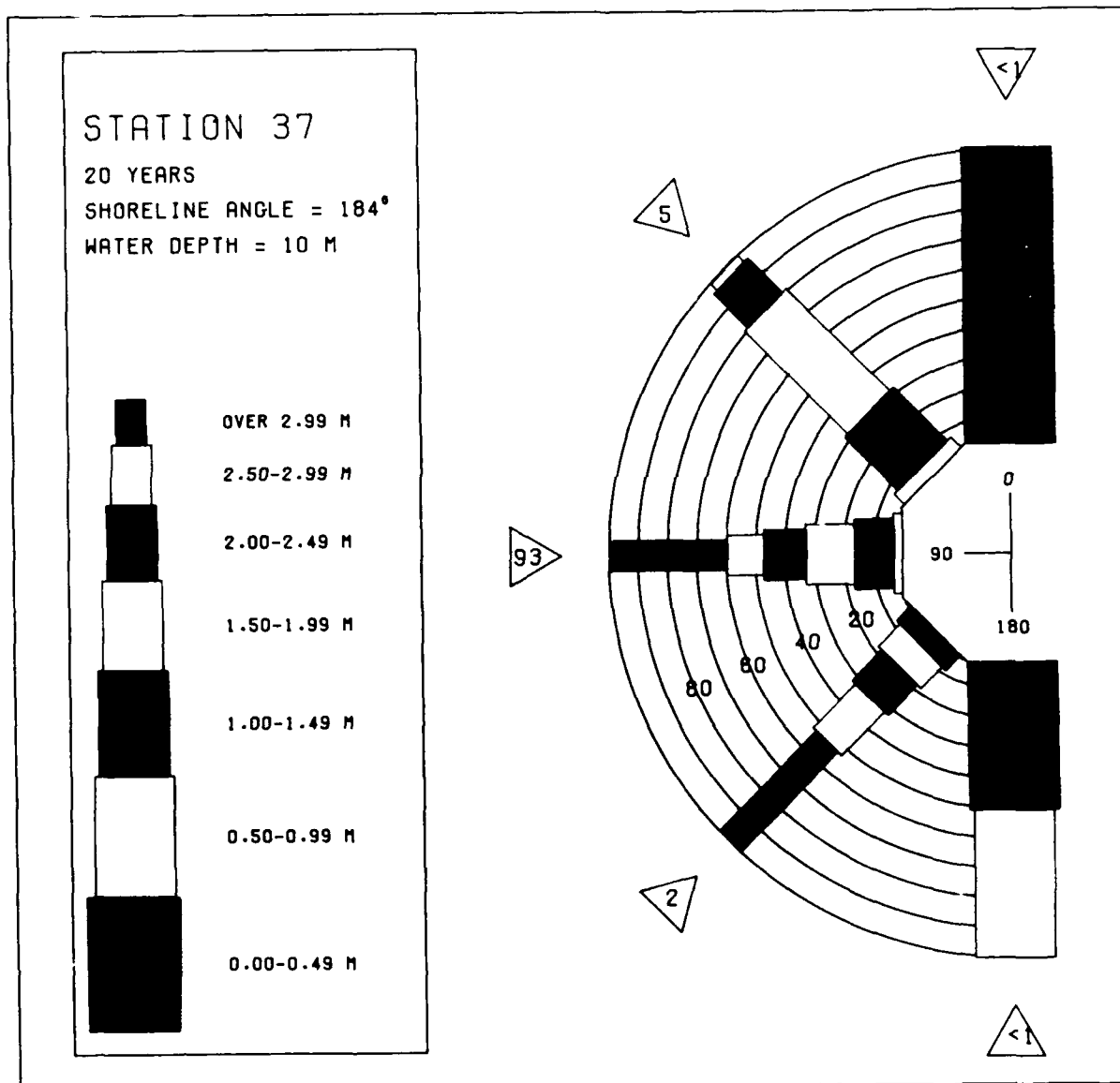
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6-11.7 11.8-13.3 13.4-15.3 15.4-18.1 18.2-22.2 22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 37 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 44.58N/124.08W LAT. LONG. END = 44.46N/124.03W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT (METER)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD (SECONDS)					15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
					10.6-11.7	11.8-13.3	13.4-15.3						
0.0-0.49	22	81	135	35	9	6	4			3			1
0.50-0.99	108	212	590	307	122	32	17			1			296
1.00-1.49	174	169	467	485	331	159	19			4			1379
1.50-1.99		118	133	366	478	276	51			7			1808
2.00-2.49		37	43	123	448	429	119			6			1444
2.50-2.99			21	55	250	554	187			16			1206
3.00-3.49			5	33	129	465	282			32			1100
3.50-3.99				13	44	301	287			16			938
4.00-4.49				3	21	126	45			32			677
4.50-4.99					6	65	55			143			445
5.00+										143			685
TOTAL	313	626	1430	1410	1838	2413	1674			352	5	0	58440

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.24 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 37 (44.58N/ 124.08W TO 44.46N/ 124.08W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1958	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1959	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1960	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1961	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1962	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1963	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1964	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1965	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1966	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1967	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1968	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1969	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1970	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1971	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1972	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1973	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1974	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9
1975	3.9	3.8	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.9	3.8	4.2	2.9

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 37 (44.58N/ 124.08W TO 44.46N/ 124.08W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1958	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1959	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1960	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1961	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1962	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1963	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1964	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1965	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1966	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1967	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1968	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1969	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1970	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1971	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1972	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1973	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1974	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1975	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0

20 YR. STATISTICS FOR PACIFIC STATION 37 (44.58N/ 124.08W TO 44.46N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.9
MEAN PEAK WAVE PERIOD	(SECONDS)	12.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	90
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.4
LARGEST WAVE HS	(METERS)	14.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	8.6
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	63
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		102406

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL	
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0	0	.	.	.	.	.	.	.	1
0.5	-	71	.	.	.	.	.	.	.	.	71
1.0	-	657	42	.	.	.	.	.	.	.	699
1.5	-	537	280	.	.	.	.	.	.	.	817
2.0	-	.	66	.	.	.	.	.	.	.	66
2.5	-	.	.	.	.	.	.	.	.	.	0
3.0	-	.	.	.	.	.	.	.	.	.	0
3.5	-	.	.	.	.	.	.	.	.	.	0
4.0	-	.	.	.	.	.	.	.	.	.	0
4.5	-	.	.	.	.	.	.	.	.	.	0
5.0	-	.	.	.	.	.	.	.	.	.	0
5.5	-	.	.	.	.	.	.	.	.	.	0
6.0	-	.	.	.	.	.	.	.	.	.	0
6.5	-	.	.	.	.	.	.	.	.	.	0
7.0	-	.	.	.	.	.	.	.	.	.	0
7.5	-	.	.	.	.	.	.	.	.	.	0
8.0	-	.	.	.	.	.	.	.	.	.	0
8.5	-	.	.	.	.	.	.	.	.	.	0
9.0	-	.	.	.	.	.	.	.	.	.	0
9.5	-	.	.	.	.	.	.	.	.	.	0
10.0	-	.	.	.	.	.	.	.	.	.	0
10.5	-	.	.	.	.	.	.	.	.	.	0
11.0	-	.	.	.	.	.	.	.	.	.	0
11.5	-	.	.	.	.	.	.	.	.	.	0
12.0	-	.	.	.	.	.	.	.	.	.	0
12.5	-	.	.	.	.	.	.	.	.	.	0
13.0	-	.	.	.	.	.	.	.	.	.	0
13.5	-	.	.	.	.	.	.	.	.	.	0
14.0	-	.	.	.	.	.	.	.	.	.	0
14.5	-	.	.	.	.	.	.	.	.	.	0
15.0	-	.	.	.	.	.	.	.	.	.	0
15.5	-	.	.	.	.	.	.	.	.	.	0
16.0	-	.	.	.	.	.	.	.	.	.	0
16.5	-	.	.	.	.	.	.	.	.	.	0
17.0	-	.	.	.	.	.	.	.	.	.	0
17.5	-	.	.	.	.	.	.	.	.	.	0
18.0	-	.	.	.	.	.	.	.	.	.	0
18.5	-	.	.	.	.	.	.	.	.	.	0
19.0	-	.	.	.	.	.	.	.	.	.	0
19.5	-	.	.	.	.	.	.	.	.	.	0
20.0	-	.	.	.	.	.	.	.	.	.	0
20.5	-	.	.	.	.	.	.	.	.	.	0
21.0	-	.	.	.	.	.	.	.	.	.	0
21.5	-	.	.	.	.	.	.	.	.	.	0
22.0	-	.	.	.	.	.	.	.	.	.	0
22.5	-	.	.	.	.	.	.	.	.	.	0
23.0	-	.	.	.	.	.	.	.	.	.	0
23.5	-	.	.	.	.	.	.	.	.	.	0
24.0	-	.	.	.	.	.	.	.	.	.	0
24.5	-	.	.	.	.	.	.	.	.	.	0
25.0	-	.	.	.	.	.	.	.	.	.	0
25.5	-	.	.	.	.	.	.	.	.	.	0
26.0	-	.	.	.	.	.	.	.	.	.	0
26.5	-	.	.	.	.	.	.	.	.	.	0
27.0	-	.	.	.	.	.	.	.	.	.	0
27.5	-	.	.	.	.	.	.	.	.	.	0
28.0	-	.	.	.	.	.	.	.	.	.	0
28.5	-	.	.	.	.	.	.	.	.	.	0
29.0	-	.	.	.	.	.	.	.	.	.	0
29.5	-	.	.	.	.	.	.	.	.	.	0
30.0	-	.	.	.	.	.	.	.	.	.	0
30.5	-	.	.	.	.	.	.	.	.	.	0
31.0	-	.	.	.	.	.	.	.	.	.	0

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0	0	0	0	0	0	0	0	0	0	6
0.5	-	154	311	200	16	5	3	1	0	0	0	675
1.0	-	1686	1187	792	179	51	5	0	0	0	0	2900
1.5	-	1368	1427	254	47	8	0	0	0	0	0	3104
2.0	-	73	1067	111	20	3	0	0	0	0	0	1271
2.5	-	0	200	47	17	0	0	0	0	0	0	267
3.0	-	0	29	41	10	1	0	0	0	0	0	71
3.5	-	0	0	0	0	0	0	0	0	0	0	31
4.0	-	0	0	0	0	0	0	0	0	0	0	0
4.5	-	0	0	0	0	0	0	0	0	0	0	0
5.0	+	0	0	0	0	0	0	0	0	0	0	0
TOTAL		2284	4222	1466	280	64	8	1	0	0	0	4875
MEAN HS(M) = 1.62		LARGEST HS(M) = 3.87		MEAN TP(SEC) = 7.0		NUMBER OF CASES = 4875						

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00	0	42	294	152	398	160	653	58	1			2581
0.05	-	22	11	3								81
0.10	-	22	294	152	398	160	653	58	1			2581
0.15	-	22	294	152	398	160	653	58	1			2581
0.20	-	22	294	152	398	160	653	58	1			2581
0.25	-	22	294	152	398	160	653	58	1			2581
0.30	-	22	294	152	398	160	653	58	1			2581
0.35	-	22	294	152	398	160	653	58	1			2581
0.40	-	22	294	152	398	160	653	58	1			2581
0.45	-	22	294	152	398	160	653	58	1			2581
0.50	-	22	294	152	398	160	653	58	1			2581
0.55	-	22	294	152	398	160	653	58	1			2581
0.60	-	22	294	152	398	160	653	58	1			2581
0.65	-	22	294	152	398	160	653	58	1			2581
0.70	-	22	294	152	398	160	653	58	1			2581
0.75	-	22	294	152	398	160	653	58	1			2581
0.80	-	22	294	152	398	160	653	58	1			2581
0.85	-	22	294	152	398	160	653	58	1			2581
0.90	-	22	294	152	398	160	653	58	1			2581
0.95	-	22	294	152	398	160	653	58	1			2581
1.00	-	22	294	152	398	160	653	58	1			2581
1.05	-	22	294	152	398	160	653	58	1			2581
1.10	-	22	294	152	398	160	653	58	1			2581
1.15	-	22	294	152	398	160	653	58	1			2581
1.20	-	22	294	152	398	160	653	58	1			2581
1.25	-	22	294	152	398	160	653	58	1			2581
1.30	-	22	294	152	398	160	653	58	1			2581
1.35	-	22	294	152	398	160	653	58	1			2581
1.40	-	22	294	152	398	160	653	58	1			2581
1.45	-	22	294	152	398	160	653	58	1			2581
1.50	-	22	294	152	398	160	653	58	1			2581
1.55	-	22	294	152	398	160	653	58	1			2581
1.60	-	22	294	152	398	160	653	58	1			2581
1.65	-	22	294	152	398	160	653	58	1			2581
1.70	-	22	294	152	398	160	653	58	1			

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.5	.	.	.	.	.	.	.	.	.	.	0
0.5-1.0	.	11	29	17	5	.	.	.	.	.	400
1.0-1.5	11	80	116	148	166	5	.	.	.	.	222
1.5-2.0	32	63	148	169	133	34	1	.	.	.	379
2.0-2.5	3	90	169	143	104	5	.	.	.	.	333
2.5-3.0	.	56	160	122	104	174	2	.	.	.	833
3.0-3.5	.	8	30	188	176	146	17	.	.	.	725
3.5-4.0	.	.	.	53	176	148	53	.	.	.	461
4.0-4.5	.	.	.	11	75	121	27	.	.	.	234
4.5-5.0	.	.	.	.	27	32	15	6	.	.	804
5.0-5.5	.	.	.	.	.	.	.	.	.	.	29
5.5-6.0	.	.	.	.	.	.	.	.	.	.	.
TOTAL	53	309	723	708	1043	628	160	6	0	0	2135

MEAN HS(M) = 2.84 LARGEST HS(M) = 5.73 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2135

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.5	.	.	.	.	.	.	.	.	.	.	3
0.5-1.0	.	1	3	.	.	.	.	.	.	.	14
1.0-1.5	18	25	1	.	.	.	.	.	.	.	44
1.5-2.0	5	17	1	.	.	.	.	.	.	.	25
2.0-2.5	.	3	.	.	.	.	.	.	.	.	3
2.5-3.0	.	.	.	.	.	.	.	.	.	.	0
3.0-3.5	.	.	.	.	.	.	.	.	.	.	0
3.5-4.0	.	.	.	.	.	.	.	.	.	.	0
4.0-4.5	.	.	.	.	.	.	.	.	.	.	0
4.5-5.0	.	.	.	.	.	.	.	.	.	.	0
5.0-5.5	.	.	.	.	.	.	.	.	.	.	0
5.5-6.0	.	.	.	.	.	.	.	.	.	.	0
TOTAL	24	61	3	0	0	0	0	0	0	0	55

MEAN HS(M) = 1.28 LARGEST HS(M) = 2.12 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 55

PHASE 3 ST. 38 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.5	0
0.5-1.0	0
1.0-1.5	0
1.5-2.0	0
2.0-2.5	0
2.5-3.0	0
3.0-3.5	0
3.5-4.0	0
4.0-4.5	0
4.5-5.0	0
5.0-5.5	0
5.5-6.0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 38 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 44.46N/124.08W LAT. LON. END= 44.35N/124.10W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0- 0.49	27	63	176	40	12	2	1	1	1	2	0	0
0.50- 0.99	159	304	490	172	174	174	174	174	174	174	174	174
1.00- 1.49	198	304	490	172	174	174	174	174	174	174	174	174
1.50- 1.99	...	...	...	...	...	...	...	...	...	...	...	...
2.00- 2.49	...	...	...	...	...	...	...	...	...	...	...	...
2.50- 2.99	...	...	...	...	...	...	...	...	...	...	...	...
3.00- 3.49	...	...	...	...	...	...	...	...	...	...	...	...
3.50- 3.99	...	...	...	...	...	...	...	...	...	...	...	...
4.00- 4.49	...	...	...	...	...	...	...	...	...	...	...	...
4.50- 4.99	...	...	...	...	...	...	...	...	...	...	...	...
5.00- 5.49	...	...	...	...	...	...	...	...	...	...	...	...
5.50- 5.99	...	...	...	...	...	...	...	...	...	...	...	...
6.00- 6.49	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	373	658	1364	1383	1817	2007	1710	243	3	0		58440

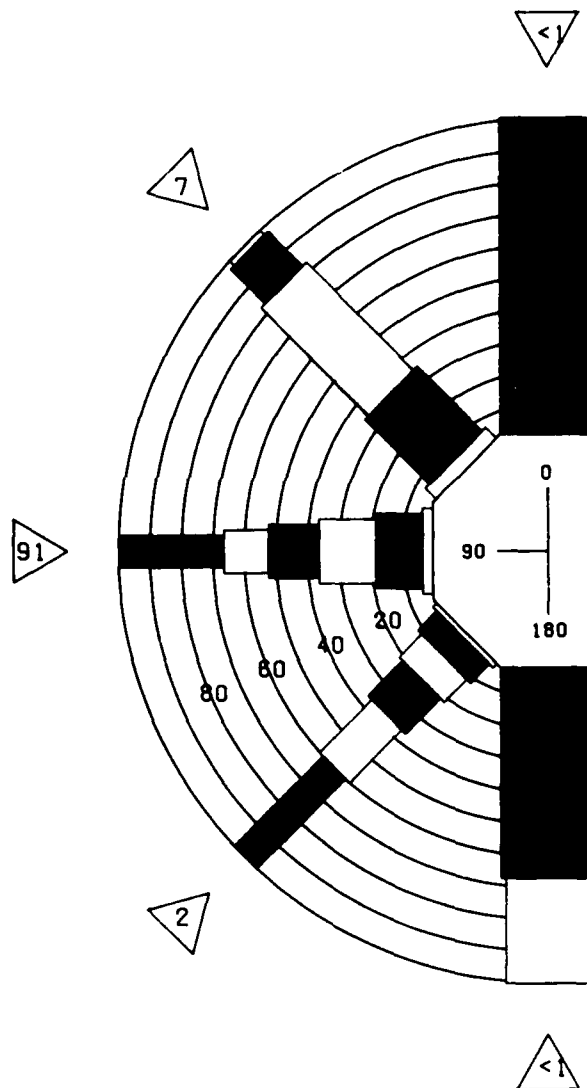
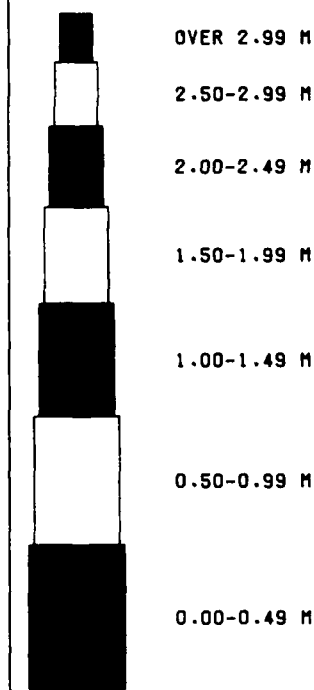
MEAN HS(M) = 2.54 LARGEST HS(M) = 7.16 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440

STATION 38

20 YEARS

SHORELINE ANGLE = 185°

WATER DEPTH = 10 M



MONTH

MEAN

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 38 (44.46N/ 124.08W TO 44.35N/ 124.10W)

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 11.5
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 12.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.1
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.2
LARGEST WAVE HS . . . . . (METERS) 16.1
LARGEST WAVE TP . . . . . (SECONDS) 17.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES) 84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . 73121400

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PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
 SHOELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
 SHOELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	88	1	.	.	.	.	.	.	.	.	89
1.00 - 1.49	821	6	.	.	.	.	.	.	.	.	827
1.50 - 1.99	633	39	.	.	.	.	.	.	.	.	672
2.00 - 2.49	1	47	.	.	.	.	.	.	.	.	48
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1544	504	0	0	0	0	0	0	0	0	2048

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.37 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1200

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
 SHOELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	14	37	1	1	.	8	10	.	.	.	61
1.00 - 1.49	60	139	150	150	80	9	.	.	.	.	488
1.50 - 1.99	112	120	180	150	122	3	.	.	.	.	597
2.00 - 2.49	54	100	200	150	122	3	.	.	.	.	529
2.50 - 2.99	.	1	2	1	1	.	.	.	.	.	5
3.00 - 3.49	.	1	2	1	1	.	.	.	.	.	5
3.50 - 3.99	.	1	2	1	1	.	.	.	.	.	5
4.00 - 4.49	.	1	2	1	1	.	.	.	.	.	5
4.50 - 4.99	.	1	2	1	1	.	.	.	.	.	5
5.00 +	.	1	2	1	1	.	.	.	.	.	5
TOTAL	1929	4371	3106	586	196	17	10	0	0	0	5981

MEAN HS(M) = 1.58 LARGEST HS(M) = 3.93 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5981

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
 SHOELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	10
0.50 - 0.99	41	260	1377	400	164	61	47	.	.	.	2235
1.00 - 1.49	17	634	4490	3447	1685	506	107	35	29	.	10023
1.50 - 1.99	30	210	3155	4945	4134	2169	484	82	8	.	15637
2.00 - 2.49	23	121	605	2794	5018	3083	1149	70	0	.	13769
2.50 - 2.99	.	22	114	639	3660	5555	1976	131	20	.	12371
3.00 - 3.49	.	1	23	232	1735	3420	2619	324	5	.	10371
3.50 - 3.99	.	1	1	20	470	3509	4316	384	5	.	7656
4.00 - 4.49	.	1	1	1	131	1514	2277	316	5	.	4922
4.50 - 4.99	.	1	1	1	42	470	2257	311	5	.	3081
5.00 +	.	1	1	1	1	167	2017	150	6	.	3241
TOTAL	111	1290	9956	12626	17040	23459	16949	2469	85	0	49105

MEAN HS(M) = 2.66 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 49105

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	8	25	.	.	.	.	.	.	.	33
1.00 - 1.49	11	85	104	17	3	.	.	.	.	.	200
1.50 - 1.99	42	73	124	54	30	1	.	.	.	.	224
2.00 - 2.49	5	83	174	135	147	83	3	.	.	.	272
2.50 - 2.99	.	71	169	213	231	20	8	.	.	.	277
3.00 - 3.49	.	8	82	205	196	133	18	.	.	.	274
3.50 - 3.99	.	.	32	73	258	174	29	.	.	.	305
4.00 - 4.49	.	.	.	17	118	124	47	.	.	.	306
4.50 - 4.99	.	.	.	.	29	51	11	3	.	.	94
5.00 +	.	.	.	1	1	11	22	6	0	0	38
TOTAL	58	334	720	715	1013	597	133	6	0	0	

MEAN HS(M) = 2.92 LARGEST HS(M) = 5.89 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2109

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	1	8	.	.	.	.	.	.	.	.	9
1.00 - 1.49	15	13	1	.	.	.	.	.	.	.	29
1.50 - 1.99	3	23	.	.	.	.	.	.	.	.	26
2.00 - 2.49	.	3	1	.	.	.	.	.	.	.	4
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	19	50	2	0	0	0	0	0	0	0	0
TOTAL	19	50	2	0	0	0	0	0	0	0	

MEAN HS(M) = 1.36 LARGEST HS(M) = 2.46 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 45

PHASE 3 ST. 39 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 160.0
 LAT. LON. START= 44.35N/124.10W LAT. LON. END= 44.21N/124.11W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 39 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. - LON. START = 44.35N/124.10W LAT. - LON. END = 44.21N/124.11W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.00-0.49	27	68	180	41	16	7	5	2	2	0	34
0.50-0.99	147	219	408	379	170	51	10	4	1	159	1599
1.00-1.49	183	234	413	297	419	217	49	2	1	2007	2007
1.50-1.99	8	26	61	95	390	200	55	2	1	1340	1340
2.00-2.49	..	..	26	45	201	108	33	1	1	1117	1117
2.50-2.99	..	..	..	15	68	35	22	..	..	821	821
3.00-3.49	..	..	..	..	27	10	3	..	..	519	519
3.50-3.99	..	..	..	..	..	3	1	..	..	316	316
4.00-4.49	..	..	..	..	..	..	..	..	..	325	325
TOTAL	365	651	1376	1389	1820	2403	1704	244	4	0	58440

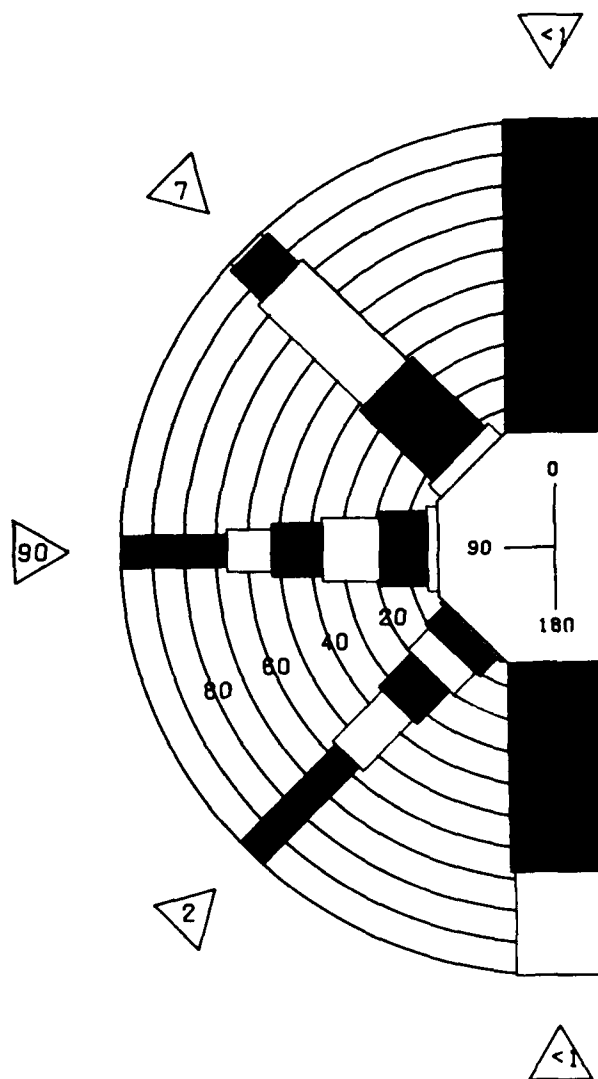
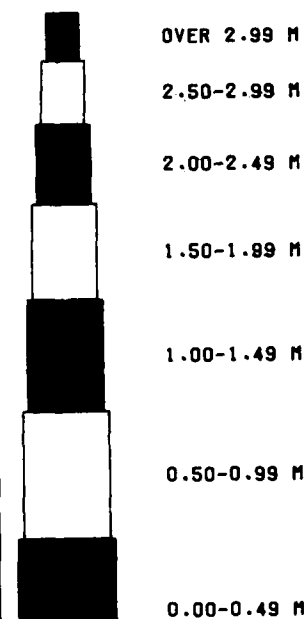
MEAN HS(M) = 2.53 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440

STATION 39

20 YEARS

SHORELINE ANGLE = 182°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 39 (44.35N/ 124.10W TO 44.21N/ 124.11W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1957	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1958	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1959	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1960	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1961	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1962	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1963	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1964	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1965	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1966	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1967	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1968	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1969	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1970	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1971	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1972	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1973	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1974	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
1975	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	2.5
MEAN	3.4	3.3	3.0	2.6	2.0	1.6	1.5	1.5	1.7	2.6	3.5	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 39 (44.35N/ 124.10W TO 44.21N/ 124.11W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1957	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1958	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1959	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1960	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1961	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1962	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1963	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1964	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1965	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1966	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1967	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1968	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1969	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1970	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1971	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1972	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1973	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1974	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
1975	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1

20 YR. STATISTICS FOR PACIFIC STATION 39 (44.35N/ 124.10W TO 44.21N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	1.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	1.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	1.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73121400

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0.0 - 14.9
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	66	2	.	.	.	.	.	.	.	.	68
1.00 - 1.49	617	113	.	.	.	.	.	.	.	.	628
1.50 - 1.99	480	30	.	.	.	.	.	.	.	.	510
2.00 - 2.49	39	.	.	.	.	.	.	.	.	.	39
2.50 - 2.99	1	.	.	.	.	.	.	.	.	.	1
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1203	148	0	0	0	0	0	0	0	0	1351

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 793

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	5	.	.	1	.	.	.	.	.	.	6
0.50 - 0.99	109	354	426	42	1	8	8	.	.	.	948
1.00 - 1.49	549	1105	1498	229	41	11	.	.	.	.	3433
1.50 - 1.99	644	1242	1684	292	22	3	.	.	.	.	2887
2.00 - 2.49	123	728	208	29	8	.	.	.	.	.	1096
2.50 - 2.99	1	191	54	20	1	.	.	.	.	.	267
3.00 - 3.49	.	44	39	10	6	.	.	.	.	.	99
3.50 - 3.99	.	3	10	1	.	.	.	.	.	.	14
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1731	3367	3122	424	79	22	8	0	0	0	5127

MEAN HS(M) = 1.56 LARGEST HS(M) = 3.92 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5127

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	6	1	.	.	8	.	.	.	.	17
0.50 - 0.99	53	427	1119	379	148	104	25	1	39	.	2295
1.00 - 1.49	456	963	4459	3032	1244	438	111	34	15	.	10352
1.50 - 1.99	49	473	3648	4999	3667	1598	251	41	10	.	14735
2.00 - 2.49	15	195	994	3237	4621	2857	581	49	5	.	12554
2.50 - 2.99	.	94	299	987	4188	4690	1363	71	17	.	11709
3.00 - 3.49	.	41	195	420	2116	5427	2029	201	5	.	10434
3.50 - 3.99	.	.	142	165	1033	4293	2845	193	.	.	8677
4.00 - 4.49	.	.	35	83	373	2689	2684	280	5	.	6149
4.50 - 4.99	.	.	1	39	138	1038	2665	270	.	.	4151
5.00 +	.	.	.	.	30	537	3256	1274	1	.	5706
TOTAL	173	2202	10893	13348	17558	23679	16410	2414	102	0	50737

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.47 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 50737

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METER')	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0.0 - 0.49	6	10	17	8	1	0
0.50 - 0.99	3	58	70	58	1	133
1.00 - 1.49	15	61	133	66	1	266
1.50 - 1.99	1	59	99	109	1	269
2.00 - 2.49	1	82	181	130	29	404
2.50 - 2.99	1	33	126	147	65	372
3.00 - 3.49	1	5	66	177	147	396
3.50 - 3.99	1	1	106	116	128	350
4.00 - 4.49	1	1	54	100	147	305
4.50 - 4.99	1	1	8	29	63	72
5.00 +	1	1	1	1	51	55
TOTAL	24	307	713	536	532	151

MEAN HS(M) = 3.27 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1771

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0.0 - 0.49	1	1	1	1	1	0
0.50 - 0.99	8	1	1	1	1	13
1.00 - 1.49	3	5	1	1	1	11
1.50 - 1.99	1	1	1	1	1	5
2.00 - 2.49	1	1	1	1	1	5
2.50 - 2.99	1	1	1	1	1	5
3.00 - 3.49	1	1	1	1	1	5
3.50 - 3.99	1	1	1	1	1	5
4.00 - 4.49	1	1	1	1	1	5
4.50 - 4.99	1	1	1	1	1	5
5.00 +	1	1	1	1	1	5
TOTAL	12	6	0	0	0	12

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.52 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 12

PHASE 3 ST. 40 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

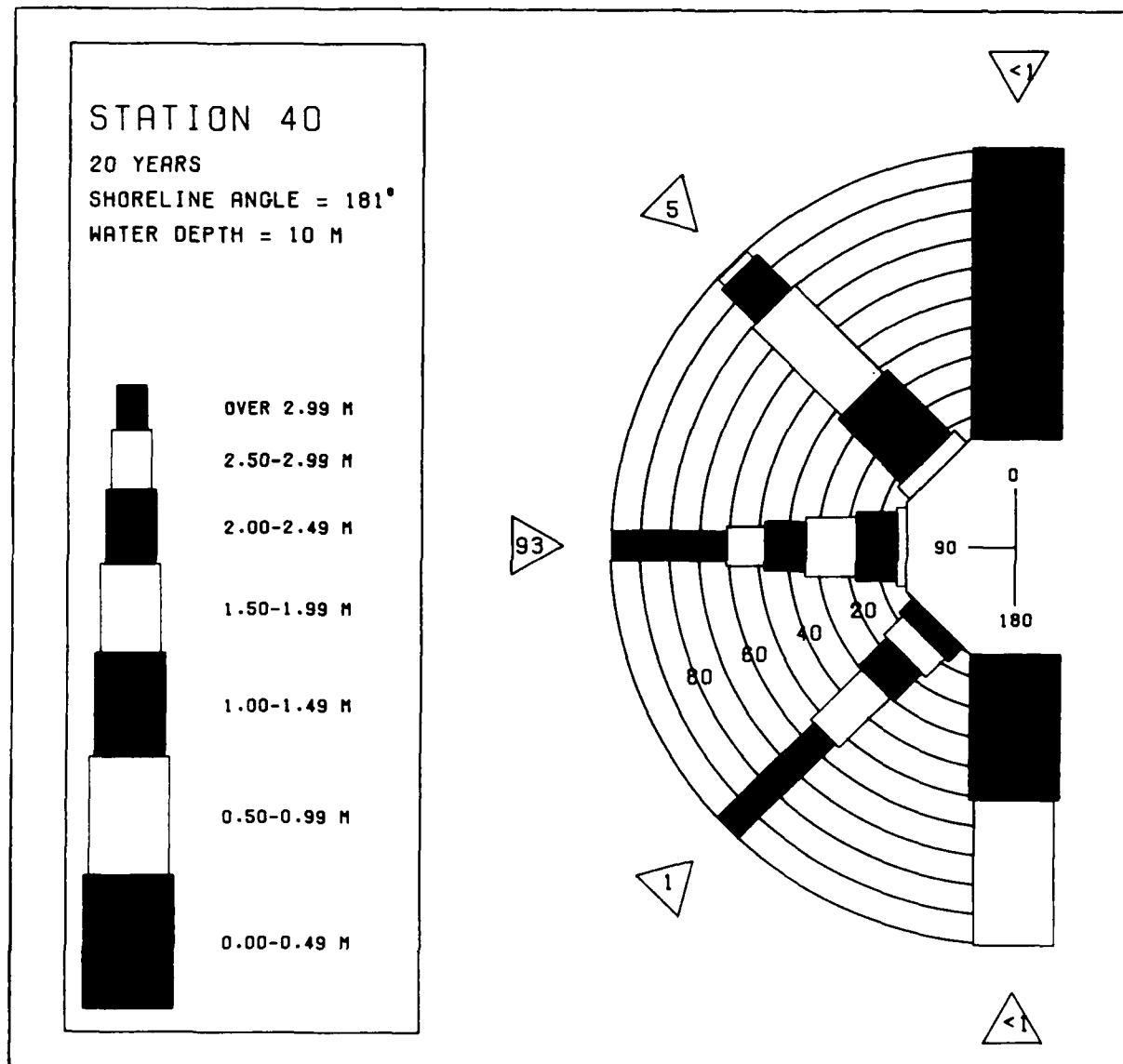
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0.0 - 0.49	1	1	1	1	1	0
0.50 - 0.99	1	1	1	1	1	0
1.00 - 1.49	1	1	1	1	1	0
1.50 - 1.99	1	1	1	1	1	0
2.00 - 2.49	1	1	1	1	1	0
2.50 - 2.99	1	1	1	1	1	0
3.00 - 3.49	1	1	1	1	1	0
3.50 - 3.99	1	1	1	1	1	0
4.00 - 4.49	1	1	1	1	1	0
4.50 - 4.99	1	1	1	1	1	0
5.00 +	1	1	1	1	1	0
TOTAL	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 40 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 44.21N/124.11W LAT. LON. END= 44.10N/124.13W
 SHORELINE ANGLE = 181.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	23	79	156	42	15	11	3	3	3	0	332
0.50-0.99	123	213	602	327	128	45	11	4	1	1	1453
1.00-1.49	149	159	466	515	369	160	25	3	1	1	1848
1.50-1.99	17	101	130	333	469	285	58	4	1	1	1397
2.00-2.49	..	36	53	110	430	471	136	7	..	..	1244
2.50-2.99	..	11	36	56	227	549	303	20	..	..	1102
3.00-3.49	..	1	21	27	121	442	288	19	..	..	919
3.50-3.99	..	..	4	13	48	283	270	28	..	..	646
4.00-4.49	..	..	1	5	23	110	370	27	..	..	436
4.50-4.99	..	..	..	1	5	63	390	127	..	..	586
5.00+	..	..	..	..	..	..	..	..	..	..	..
TOTAL	312	600	1469	1429	1835	2419	1654	239	6	0	5844

MEAN HS(M) = 2.71 LARGEST HS(M) = 7.47 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 40 (44.21N/ 124.11W TO 44.10N/ 124.13W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
1975	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1976	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1977	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1978	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1979	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1980	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1981	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1982	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1983	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1984	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1985	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1986	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
1987	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7
MEAN	3.8	3.7	3.2	2.7	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	2.7

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 40 (44.21N/ 124.11W TO 44.10N/ 124.13W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
1975	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1976	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1977	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1978	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1979	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1980	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1981	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1982	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1983	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1984	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1985	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1986	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1987	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

20 YR. STATISTICS FOR PACIFIC STATION 40 (44.21N/ 124.11W TO 44.10N/ 124.13W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	9.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.4
LARGEST WAVE HS	(METERS)	14.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	98
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
6.5-6.99	0
7.0-7.49	0
7.5-7.99	0
8.0-8.49	0
8.5-8.99	0
9.0-9.49	0
9.5-9.99	0
10.0-10.49	0
10.5-10.99	0
11.0-11.49	0
11.5-11.99	0
12.0-12.49	0
12.5-12.99	0
13.0-13.49	0
13.5-13.99	0
14.0-14.49	0
14.5-14.99	0
15.0-15.49	0
15.5-15.99	0
16.0-16.49	0
16.5-16.99	0
17.0-17.49	0
17.5-17.99	0
18.0-18.49	0
18.5-18.99	0
19.0-19.49	0
19.5-19.99	0
20.0-20.49	0
20.5-20.99	0
21.0-21.49	0
21.5-21.99	0
22.0-22.49	0
22.5-22.99	0
23.0-23.49	0
23.5-23.99	0
24.0-24.49	0
24.5-24.99	0
25.0-25.49	0
25.5-25.99	0
26.0-26.49	0
26.5-26.99	0
27.0-27.49	0
27.5-27.99	0
28.0-28.49	0
28.5-28.99	0
29.0-29.49	0
29.5-29.99	0
30.0-30.49	0
30.5-30.99	0
31.0-31.49	0
31.5-31.99	0
32.0-32.49	0
32.5-32.99	0
33.0-33.49	0
33.5-33.99	0
34.0-34.49	0
34.5-34.99	0
35.0-35.49	0
35.5-35.99	0
36.0-36.49	0
36.5-36.99	0
37.0-37.49	0
37.5-37.99	0
38.0-38.49	0
38.5-38.99	0
39.0-39.49	0
39.5-39.99	0
40.0-40.49	0
40.5-40.99	0
41.0-41.49	0
41.5-41.99	0
42.0-42.49	0
42.5-42.99	0
43.0-43.49	0
43.5-43.99	0
44.0-44.49	0
44.5-44.99	0
45.0-45.49	0
45.5-45.99	0
46.0-46.49	0
46.5-46.99	0
47.0-47.49	0
47.5-47.99	0
48.0-48.49	0
48.5-48.99	0
49.0-49.49	0
49.5-49.99	0
50.0-50.49	0
50.5-50.99	0
51.0-51.49	0
51.5-51.99	0
52.0-52.49	0
52.5-52.99	0
53.0-53.49	0
53.5-53.99	0
54.0-54.49	0
54.5-54.99	0
55.0-55.49	0
55.5-55.99	0
56.0-56.49	0
56.5-56.99	0
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61.0-61.49	0
61.5-61.99	0
62.0-62.49	0
62.5-62.99	0
63.0-63.49	0
63.5-63.99	0
64.0-64.49	0
64.5-64.99	0
65.0-65.49	0
65.5-65.99	0
66.0-66.49	0
66.5-66.99	0
67.0-67.49	0
67.5-67.99	0
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68.5-68.99	0
69.0-69.49	0
69.5-69.99	0
70.0-70.49	0
70.5-70.99	0
71.0-71.49	0
71.5-71.99	0
72.0-72.49	0
72.5-72.99	0
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79.5-79.99	0
80.0-80.49	0
80.5-80.99	0
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81.5-81.99	0
82.0-82.49	0
82.5-82.99	0
83.0-83.49	0
83.5-83.99	0
84.0-84.49	0
84.5-84.99	0
85.0-85.49	0
85.5-85.99	0
86.0-86.49	0
86.5-86.99	0
87.0-87.49	0
87.5-87.99	0
88.0-88.49	0
88.5-88.99	0
89.0-89.49	0
89.5-89.99	.	.									

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 44.10N/124.13W LAT. LONG. END= 43.98N/124.15W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	11	34	20	.	.	.	.	.	.	.	0
0.5-0.99	6	78	82	11	.	.	.	.	.	.	65
1.0-1.49	15	97	148	75	11	.	.	.	.	.	177
1.5-1.99	.	59	118	95	133	3	.	.	.	.	346
2.0-2.49	.	78	164	112	175	41	.	.	.	.	350
2.5-2.99	.	29	130	131	179	95	1	.	.	.	549
3.0-3.49	.	5	85	105	188	157	46	.	.	.	572
3.5-3.99	.	.	17	47	123	142	22	.	.	.	587
4.0-4.49	.	.	8	17	94	77	44	.	.	.	351
4.5-4.99	.	.	.	.	29	109	56	.	.	.	240
5.0-5.49	.	.	.	.	832	624	177	.	.	.	197
TOTAL	32	380	792	594	832	624	177	3	0	0	

MEAN HS(M) = 3.18 LARGEST HS(M) = 6.90 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2020

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 44.10N/124.13W LAT. LONG. END= 43.98N/124.15W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	.	.	.	.	.	.	.	.	.	0
0.5-0.99	1	.	.	.	.	.	.	.	.	.	0
1.0-1.49	3	3	.	.	.	.	.	.	.	.	0
1.5-1.99	.	5	.	.	.	.	.	.	.	.	0
2.0-2.49	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	10	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.74 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 15

PHASE 3 ST. 41 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 44.10N/124.13W LAT. LONG. END= 43.98N/124.15W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

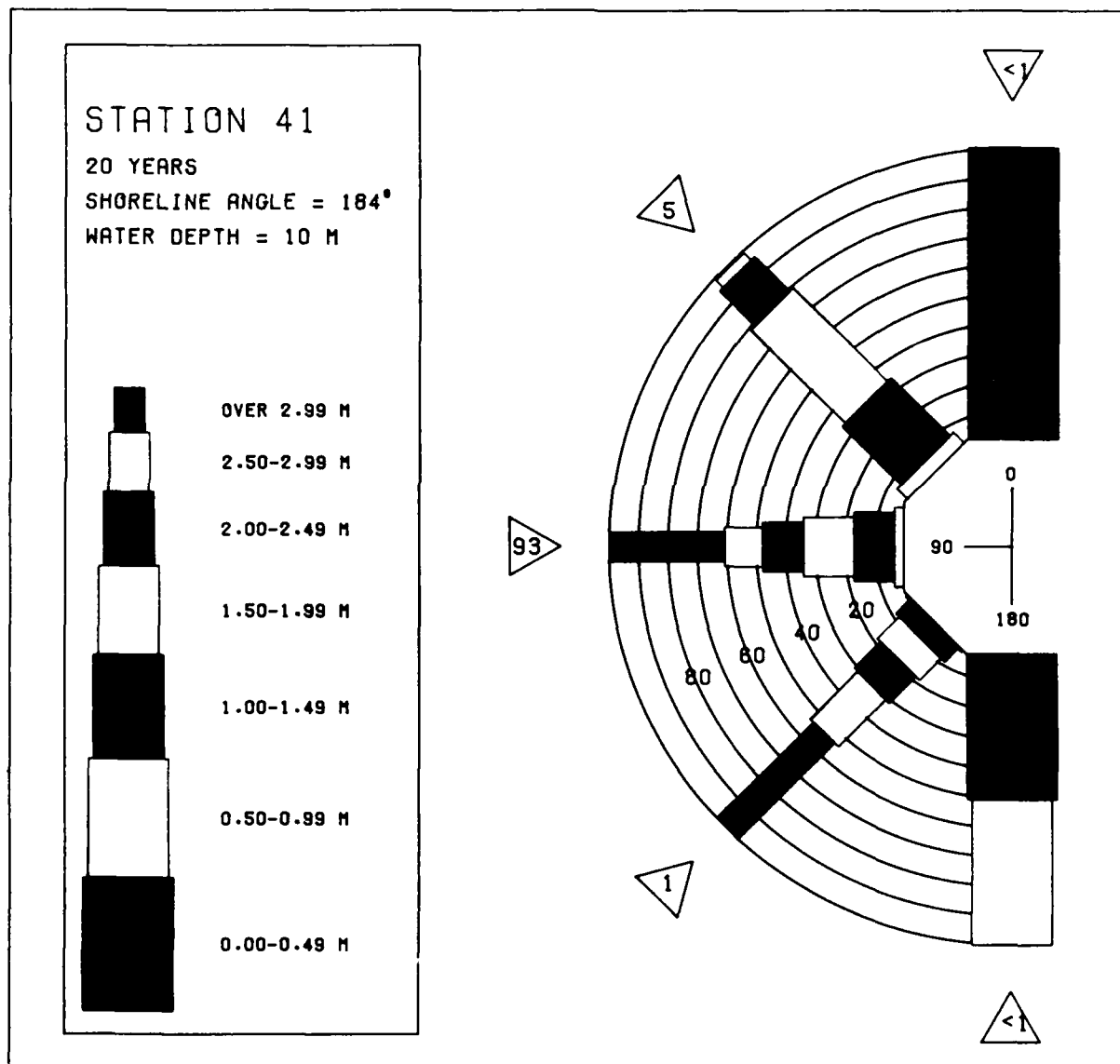
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 41 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 44.10N/124.13W LAT. LON. END= 43.98N/124.15W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	23	77	151	40	14	11	3	3	3	1	1	322
0.50-0.99	119	210	599	320	125	43	11	4	1	1	1	1431
1.00-1.49	159	158	467	513	362	158	24	4	1	1	1	1846
1.50-1.99	20	105	131	339	468	280	55	4	1	1	1	1402
2.00-2.49	.	37	52	111	435	475	136	7	1	1	1	1254
2.50-2.99	.	11	34	56	235	553	303	19	1	1	1	1111
3.00-3.49	.	1	21	25	119	445	386	19	1	1	1	916
3.50-3.99	.	.	4	12	46	285	372	27	1	1	1	646
4.00-4.49	.	.	1	4	22	112	370	26	1	1	1	635
4.50-4.99	.	.	.	.	5	62	377	129	1	1	1	593
5.00+	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	321	599	1460	1420	1831	2424	1657	238	6	0	0	58440

MEAN HS(M) = 2.72 LARGEST HS(M) = 7.38 MEAN TP(SEC)= 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 41 (44.10N/ 124.13W TO 43.98N/ 124.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	3.8	3.7	3.3	2.8	2.1	1.7	1.6	1.5	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 41 (44.10N/ 124.13W TO 43.98N/ 124.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

20 YR. STATISTICS FOR PACIFIC STATION 41 (44.10N/ 124.13W TO 43.98N/ 124.15W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.5
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	99.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0.0 - 14.9
 LAT. LON. START = 43.98N/124.15W LAT. LON. END = 43.86N/124.16W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 43.98N/124.15W LAT. LON. END = 43.86N/124.16W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	37	.	.	.	.	.	.	.	.	.	37
1.00 - 1.49	443	3	.	.	.	.	.	.	.	.	446
1.50 - 1.99	385	37	.	.	.	.	.	.	.	.	422
2.00 - 2.49	42	36	.	.	.	.	.	.	.	.	78
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	907	49	0	0	0	0	0	0	0	0	956

MEAN HS(M) = 1.51 LARGEST HS(M) = 2.59 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 561

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 43.98N/124.15W LAT. LON. END = 43.86N/124.16W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	5	.	.	.	.	.	.	.	.	.	7
0.50 - 0.99	126	237	181	15	1	5	.	.	.	.	565
1.00 - 1.49	669	797	467	107	17	5	.	.	.	.	2058
1.50 - 1.99	1168	913	124	29	8	1	.	.	.	.	2442
2.00 - 2.49	157	778	85	3	.	.	.	.	.	.	1023
2.50 - 2.99	5	207	47	3	.	.	.	.	.	.	262
3.00 - 3.49	.	46	34	.	.	.	.	.	.	.	80
3.50 - 3.99	.	3	6	.	.	.	.	.	.	.	9
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2130	2981	945	158	26	6	0	0	0	0	3659

MEAN HS(M) = 1.64 LARGEST HS(M) = 3.95 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 3659

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 43.98N/124.15W LAT. LON. END = 43.86N/124.16W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	54	8	3	.	.	8	.	.	.	.	19
0.50 - 0.99	54	489	1305	388	143	106	34	1	35	.	2555
1.00 - 1.49	58	1206	5403	3064	1220	427	111	32	18	.	11539
1.50 - 1.99	54	499	4401	3006	3588	1587	248	42	10	.	15435
2.00 - 2.49	15	207	1139	3235	4585	2782	556	49	3	.	11631
2.50 - 2.99	.	97	284	1009	4260	4702	1362	71	15	.	11800
3.00 - 3.49	.	44	169	433	2157	5427	2007	193	3	.	10443
3.50 - 3.99	.	1	111	147	1001	4317	2828	200	5	.	8610
4.00 - 4.49	.	.	29	75	340	2737	2710	270	5	.	6166
4.50 - 4.99	.	.	1	29	126	1050	2648	261	1	.	4115
5.00 +	.	.	.	8	18	504	3937	1300	1	.	5708
TOTAL	181	2551	12845	13459	17438	23647	16441	2419	100	0	52082

MEAN HS(M) = 2.79 LARGEST HS(M) = 7.34 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 52082

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 43.93N/124.15W LAT. LONG. END = 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
LAT. / ON. START = 43.98H/124.15W LAT. / ON. END = 43.86H/124.16W
SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.000000	0.49	.	.	.	.	.	.	.	.	.	0
0.000000	0.99	.	.	.	.	.	.	.	.	.	1
0.000000	1.49	.	.	.	.	.	.	.	.	.	2
0.000000	1.99	.	.	.	.	.	.	.	.	.	3
0.000000	2.49	.	.	.	.	.	.	.	.	.	4
0.000000	2.99	.	.	.	.	.	.	.	.	.	5
0.000000	3.49	.	.	.	.	.	.	.	.	.	6
0.000000	3.99	.	.	.	.	.	.	.	.	.	7
0.000000	4.49	.	.	.	.	.	.	.	.	.	8
0.000000	4.99	.	.	.	.	.	.	.	.	.	9
0.000000	5.49	.	.	.	.	.	.	.	.	.	10
0.000000	5.99	.	.	.	.	.	.	.	.	.	11
0.000000	6.49	.	.	.	.	.	.	.	.	.	12
0.000000	6.99	.	.	.	.	.	.	.	.	.	13
0.000000	7.49	.	.	.	.	.	.	.	.	.	14
0.000000	7.99	.	.	.	.	.	.	.	.	.	15
0.000000	8.49	.	.	.	.	.	.	.	.	.	16
0.000000	8.99	.	.	.	.	.	.	.	.	.	17
0.000000	9.49	.	.	.	.	.	.	.	.	.	18
0.000000	9.99	.	.	.	.	.	.	.	.	.	19
0.000000	10.49	.	.	.	.	.	.	.	.	.	20
0.000000	10.99	.	.	.	.	.	.	.	.	.	21
0.000000	11.49	.	.	.	.	.	.	.	.	.	22
0.000000	11.99	.	.	.	.	.	.	.	.	.	23
0.000000	12.49	.	.	.	.	.	.	.	.	.	24
0.000000	12.99	.	.	.	.	.	.	.	.	.	25
0.000000	13.49	.	.	.	.	.	.	.	.	.	26
0.000000	13.99	.	.	.	.	.	.	.	.	.	27
0.000000	14.49	.	.	.	.	.	.	.	.	.	28
0.000000	14.99	.	.	.	.	.	.	.	.	.	29
0.000000	15.49	.	.	.	.	.	.	.	.	.	30
0.000000	15.99	.	.	.	.	.	.	.	.	.	31
0.000000	16.49	.	.	.	.	.	.	.	.	.	32
0.000000	16.99	.	.	.	.	.	.	.	.	.	33
0.000000	17.49	.	.	.	.	.	.	.	.	.	34
0.000000	17.99	.	.	.	.	.	.	.	.	.	35
0.000000	18.49	.	.	.	.	.	.	.	.	.	36
0.000000	18.99	.	.	.	.	.	.	.	.	.	37
0.000000	19.49	.	.	.	.	.	.	.	.	.	38
0.000000	19.99	.	.	.	.	.	.	.	.	.	39
0.000000	20.49	.	.	.	.	.	.	.	.	.	40
0.000000	20.99	.	.	.	.	.	.	.	.	.	41
0.000000	21.49	.	.	.	.	.	.	.	.	.	42
0.000000	21.99	.	.	.	.	.	.	.	.	.	43
0.000000	22.49	.	.	.	.	.	.	.	.	.	44
0.000000	22.99						

PHASE 3 ST. 42 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LONG. START = 43.98N/124.15W LAT. LONG. END = 43.86N/124.16W
SHORELINE ANGLE = 185.0 (DEG. 42.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0.49	.	.	.	.	.	.	.	.	.	.	0
0.1	0.99	.	.	.	.	.	.	.	.	.	.	0
0.2	1.49	.	.	.	.	.	.	.	.	.	.	0
0.3	1.99	.	.	.	.	.	.	.	.	.	.	0
0.4	2.49	.	.	.	.	.	.	.	.	.	.	0
0.5	2.99	.	.	.	.	.	.	.	.	.	.	0
0.6	3.49	.	.	.	.	.	.	.	.	.	.	0
0.7	3.99	.	.	.	.	.	.	.	.	.	.	0
0.8	4.49	.	.	.	.	.	.	.	.	.	.	0
0.9	4.99	.	.	.	.	.	.	.	.	.	.	0
5.0	5.49	.	.	.	.	.	.	.	.	.	.	0
5.1	5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.		LARGEST HS(M) = 0.		MEAN TP(SEC) = 0.		NUMBER OF CASES =		0				

PHASE 3 ST. 42 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 43.98N/124.15W LAT. LON. END = 43.86N/124.16W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	23	77	155	140	14	11	3	1	3	0	321
0.50-0.99	1100	2009	1425	1197	1277	1472	1370	1327	11	1	3252
1.00-1.49	162	1006	1425	1197	1277	1472	1370	1327	11	1	3252
1.50-1.99	21	11	30	11	11	11	11	11	11	11	11
2.00-2.49	..	..	..	..	..	..	..	..	..	..	..
2.50-2.99	..	..	..	..	..	..	..	..	..	..	..
3.00-3.49	..	..	..	..	..	..	..	..	..	..	..
3.50-3.99	..	..	..	..	..	..	..	..	..	..	..
4.00-4.49	..	..	..	..	..	..	..	..	..	..	..
4.50-4.99	..	..	..	..	..	..	..	..	..	..	..
5.00-5.49	..	..	..	..	..	..	..	..	..	..	..
5.50-5.99	..	..	..	..	..	..	..	..	..	..	..
TOTAL	324	597	1458	1420	1830	2426	1659	240	6	0	58440

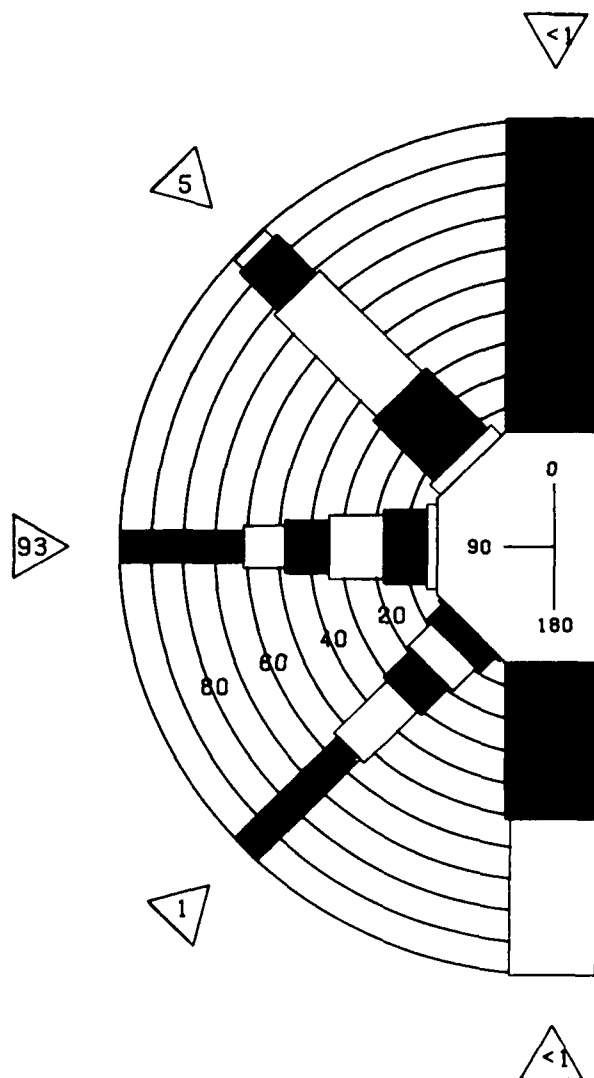
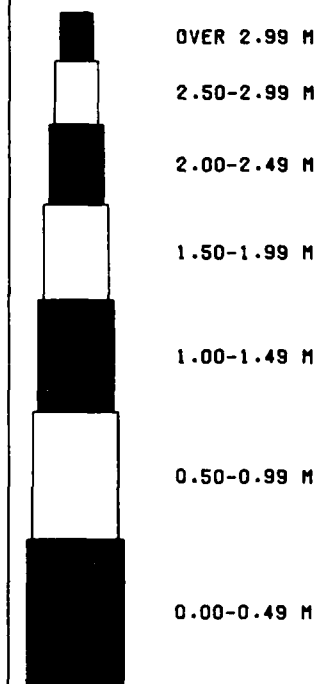
MEAN HS(M) = 2.72 LARGEST HS(M) = 7.34 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440

STATION 42

20 YEARS

SHORELINE ANGLE = 185°

WATER DEPTH = 10 M



WIS STATION 42 (43.98N/ 124.15W TO 43.86N/ 124.16W)

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

MEAN	STANDARD DEVIATION	MINIMUM	MAXIMUM
4.1	0.5	3.0	5.0
3.7	0.7	2.0	5.0
2.8	0.8	1.0	5.0
1.8	0.6	1.0	3.0
1.5	0.5	1.0	3.0
1.6	0.6	1.0	3.0
1.7	0.7	1.0	3.0
2.1	0.6	1.0	3.0
2.8	0.8	1.0	5.0
3.3	0.7	2.0	5.0
3.7	0.7	2.0	5.0
3.8	0.6	2.0	5.0

WIS STATION 42 (43.98N/ 124.15W TO 43.86N/ 124.16W)

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

[illegible]

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 2.7
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 11.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.3
LARGEST WAVE HS . . . . . (SECONDS) 3.3
LARGEST WAVE HS ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 15.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 99.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . . . 69121118

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PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	1
0.50-0.99	42	1	.	.	.	.	.	.	.	.	43
1.00-1.49	527	34	.	.	.	.	.	.	.	.	561
1.50-1.99	391	275	.	.	.	.	.	.	.	.	666
2.00-2.49	.	78	.	.	.	.	.	.	.	.	78
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	961	388	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.45 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 791

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	4
0.50-0.99	130	164	121	6	.	1	5	.	.	.	427
1.00-1.49	1299	884	508	107	23	.	.	.	.	.	2231
1.50-1.99	1264	1339	135	23	3	.	.	.	.	.	2764
2.00-2.49	66	1031	68	5	.	.	.	.	.	.	1170
2.50-2.99	.	164	44	10	.	.	.	.	.	.	218
3.00-3.49	.	11	8	3	.	.	.	.	.	.	55
3.50-3.99	.	.	.	1	.	.	.	.	.	.	9
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2159	3594	928	155	26	1	5	0	0	0	0

MEAN HS(M) = 2.66 LARGEST HS(M) = 3.70 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 4023

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	6
0.50-0.99	37	331	1067	183	63	47	20	1	15	.	1764
1.00-1.49	61	892	4733	2698	1018	304	20	27	17	.	9920
1.50-1.99	39	518	4770	4770	3362	1374	216	35	8	.	15085
2.00-2.49	11	320	1309	3838	4298	2577	513	41	.	.	13035
2.50-2.99	.	111	286	1078	4298	4573	1252	65	11	.	11693
3.00-3.49	.	34	188	429	2393	5445	1868	159	8	.	10624
3.50-3.99	.	3	128	164	1050	4493	2744	193	1	.	8826
4.00-4.49	.	.	32	75	376	2895	2722	251	10	.	6361
4.50-4.99	.	.	.	17	140	1261	2686	368	3	.	4372
5.00+	.	.	.	.	34	605	4466	1343	3	.	6452
TOTAL	148	2215	12526	13253	17250	23674	16606	2373	73	0	0

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51516

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3						
0.0-0.49													0
0.50-0.99	10	51	18										79
1.00-1.49	5	97	187	13									202
1.50-1.99	22	90	184	78	29								403
2.00-2.49		66	118	116	106	10							416
2.50-2.99		65	181	109	167	51	1						574
3.00-3.49		11	148	104	147	121	17						548
3.50-3.99		3	78	118	188	157	44						588
4.00-4.49			27	44	121	118	41						351
4.50-4.99			3	22	92	61	51						229
5.00+				1	34	99	49	6	0	0			189
TOTAL	37	383	844	605	884	617	203	6	0	0			

MEAN HS(M) = 3.11 LARGEST HS(M) = 7.22 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2104

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3						
0.0-0.49													0
0.50-0.99	1												1
1.00-1.49	5	1											6
1.50-1.99	1												1
2.00-2.49													0
2.50-2.99													0
3.00-3.49													0
3.50-3.99													0
4.00-4.49													0
4.50-4.99													0
5.00+													0
TOTAL	7	1	0	0	0	0	0	0	0	0	0		8

MEAN HS(M) = 1.22 LARGEST HS(M) = 1.60 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 6

PHASE 3 ST. 43 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 43.86N/124.16W LAT. LON. END= 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

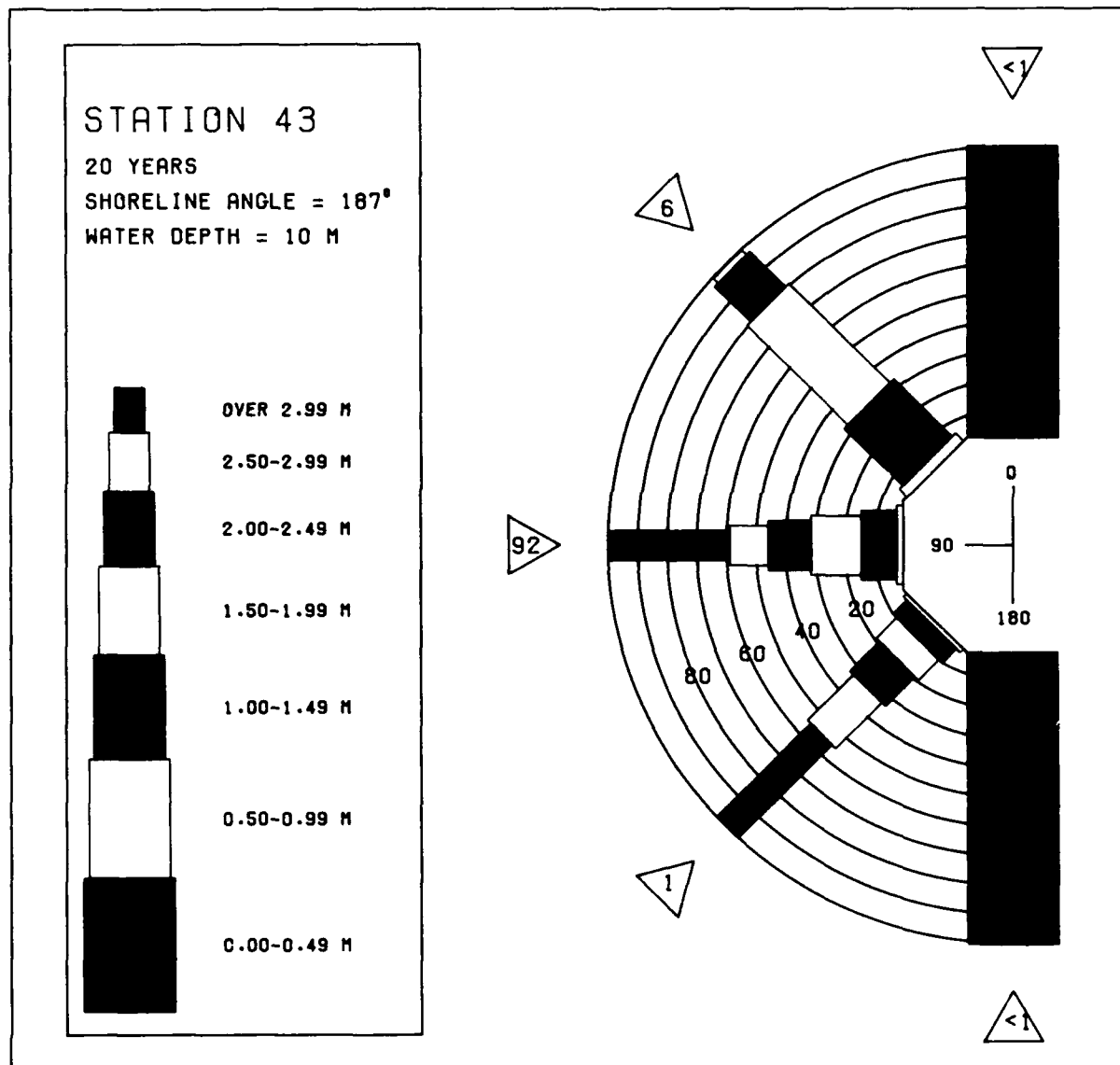
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3						
0.0-0.49													0
0.50-0.99													0
1.00-1.49													0
1.50-1.99													0
2.00-2.49													0
2.50-2.99													0
3.00-3.49													0
3.50-3.99													0
4.00-4.49													0
4.50-4.99													0
5.00+													0
TOTAL	0	0	0	0	0	0	0	0	0	0	0		0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 43 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. - LONG. START = 43.86N/124.16W LAT. - LONG. END = 43.75N/124.20W
 SHORELINE ANGLE = 187.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	22	54	120	18	6	4	2	1	1	0	0
0.50-0.99	129	201	532	281	104	30	2	2	1	1	2
1.00-1.49	171	322	832	487	338	127	2	2	1	1	108
1.50-1.99	7	139	510	395	467	262	1	2	1	1	124
2.00-2.49	...	34	149	119	25	26	1	1	1	1	11
2.50-2.99	...	5	37	53	12	30	1	1	1	1	13
3.00-3.49	...	...	21	11	4	1	1	1	1	1	9
3.50-3.99	...	...	5	3	2	1	1	1	1	1	6
4.00-4.49	...	...	...	1	1	1	1	1	1	1	6
4.50-4.99	...	...	...	...	...	...	...	...	...	...	5
5.00+	...	...	...	...	...	...	...	...	...	...	6
TOTAL	329	655	1425	1395	1812	2425	1677	234	4	0	58440

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 43 (43.86N/ 124.16W TO 43.75N/ 124.20W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1957	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1958	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1959	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1960	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1961	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1962	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1963	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1964	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1965	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1966	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1967	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1968	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1969	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1970	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1971	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1972	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1973	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1974	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
1975	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	2.5
MEAN	3.9	3.8	3.3	2.8	2.1	1.8	1.6	1.5	1.8	2.8	3.8	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 43 (43.86N/ 124.16W TO 43.75N/ 124.20W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1957	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1958	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1959	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1960	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1961	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1962	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1963	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1964	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1965	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1966	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1967	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1968	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1969	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1970	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1971	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1972	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1973	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1974	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
1975	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6

20 YR. STATISTICS FOR PACIFIC STATION 43 (43.86N/ 124.16W TO 43.75N/ 124.20W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	11.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	110.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121110

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
 SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
 SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	18
1.00 - 1.49	400	17	.	.	.	.	.	.	.	.	417
1.50 - 1.99	359	207	.	.	.	.	.	.	.	.	566
2.00 - 2.49	.	54	.	.	.	.	.	.	.	.	54
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	777	278	0	0	0	0	0	0	0	0	618

MEAN HS(M) = 1.55 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 618

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
 SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	2
0.50 - 0.99	130	107	44	3	.	.	3	.	.	.	287
1.00 - 1.49	740	771	210	47	6	.	.	.	.	.	1794
1.50 - 1.99	1478	1286	83	6	.	.	.	.	.	.	2853
2.00 - 2.49	95	1148	49	.	.	.	.	.	.	.	1292
2.50 - 2.99	.	196	39	3	.	.	.	.	.	.	238
3.00 - 3.49	.	20	25	.	.	.	.	.	.	.	45
3.50 - 3.99	.	.	6	.	.	.	.	.	.	.	6
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2444	3528	457	59	6	0	3	0	0	0	3806

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.69 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 3806

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 43.75N/124.20W LAT. LON. END= 43.61N/124.23W
 SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	46	321	1105	176	61	46	22	1	13	.	1791
1.00 - 1.49	80	1071	4953	2717	1013	305	71	27	18	.	10256
1.50 - 1.99	49	571	4715	4644	3352	1350	215	23	8	.	14927
2.00 - 2.49	11	232	1339	3843	4466	2541	516	39	.	.	12987
2.50 - 2.99	.	124	272	1093	4312	4611	1238	63	10	.	11728
3.00 - 3.49	.	37	183	388	2393	3544	1894	160	10	.	10609
3.50 - 3.99	.	3	116	142	1023	3526	2784	201	1	.	8796
4.00 - 4.49	.	.	35	68	328	2251	2719	248	10	.	6269
4.50 - 4.99	.	.	.	10	123	1232	2703	268	.	.	4336
5.00 +	.	.	.	.	20	573	4430	1353	3	.	6379
TOTAL	186	2365	12718	13086	17091	23520	16592	2383	73	0	51496

MEAN HS(M) = 2.87 LARGEST HS(M) = 7.19 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51496

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 43.75N/124.20W LAT. LON. END = 43.61N/124.23W
 SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	88	2	1	1	1	1	1	1	1	1
1.00 - 0.99	1	116	1	1	1	1	1	1	1	1	1
1.50 - 1.49	20	97	1	1	1	1	1	1	1	1	1
2.00 - 1.99	1	106	1	1	1	1	1	1	1	1	1
2.50 - 2.49	1	1	1	1	1	1	1	1	1	1	1
3.00 - 2.99	1	1	1	1	1	1	1	1	1	1	1
3.50 - 3.49	1	1	1	1	1	1	1	1	1	1	1
4.00 - 3.99	1	1	1	1	1	1	1	1	1	1	1
4.50 - 4.49	1	1	1	1	1	1	1	1	1	1	1
5.00 +	1	1	1	1	1	1	1	1	1	1	1
TOTAL	38	438	961	762	1030	741	257	6	0	0	2496

MEAN HS(M) = 3.03 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2496

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 43.75N/124.20W LAT. LON. END = 43.61N/124.23W
 SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	1	1	1	1	1	1	1	1	1	1
1.00 - 0.99	1	1	1	1	1	1	1	1	1	1	1
1.50 - 1.49	1	1	1	1	1	1	1	1	1	1	1
2.00 - 1.99	1	1	1	1	1	1	1	1	1	1	1
2.50 - 2.49	1	1	1	1	1	1	1	1	1	1	1
3.00 - 2.99	1	1	1	1	1	1	1	1	1	1	1
3.50 - 3.49	1	1	1	1	1	1	1	1	1	1	1
4.00 - 3.99	1	1	1	1	1	1	1	1	1	1	1
4.50 - 4.49	1	1	1	1	1	1	1	1	1	1	1
5.00 +	1	1	1	1	1	1	1	1	1	1	1
TOTAL	12	25	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.96 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 24

PHASE 3 ST. 44 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 43.75N/124.20W LAT. LON. END = 43.61N/124.23W
 SHORELINE ANGLE = 191.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	1	1	1	1	1	1	1	1	1	1
1.00 - 0.99	1	1	1	1	1	1	1	1	1	1	1
1.50 - 1.49	1	1	1	1	1	1	1	1	1	1	1
2.00 - 1.99	1	1	1	1	1	1	1	1	1	1	1
2.50 - 2.49	1	1	1	1	1	1	1	1	1	1	1
3.00 - 2.99	1	1	1	1	1	1	1	1	1	1	1
3.50 - 3.49	1	1	1	1	1	1	1	1	1	1	1
4.00 - 3.99	1	1	1	1	1	1	1	1	1	1	1
4.50 - 4.49	1	1	1	1	1	1	1	1	1	1	1
5.00 +	1	1	1	1	1	1	1	1	1	1	1
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 44 (43.75N/ 124.20W TO 43.61N/ 124.23W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1957	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1958	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1959	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1960	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1961	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1962	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1963	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1964	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1965	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1966	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1967	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1968	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1969	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1970	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1971	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1972	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1973	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1974	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
1975	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5
MEAN	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.5	1.8	2.9	3.7	4.1	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 44 (43.75N/ 124.20W TO 43.61N/ 124.23W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1957	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1958	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1959	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1960	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1961	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1962	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1963	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1964	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1965	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1966	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1967	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1968	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1969	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1970	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1971	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1972	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1973	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1974	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
1975	6.3	5.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1

20 YR. STATISTICS FOR PACIFIC STATION 44 (43.75N/ 124.20W TO 43.61N/ 124.23W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.0
LARGEST WAVE HS	(METERS)	11.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	105.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 1

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	326	8	.	.	.	.	.	.	.	.	334
1.00 - 1.49	331	155	.	.	.	.	.	.	.	.	486
1.50 - 1.99	3	39	.	.	.	.	.	.	.	.	42
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	666	202	0	0	0	0	0	0	0	0	868

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.32 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 510

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	2
0.50 - 0.99	131	75	17	3	.	.	3	.	.	.	229
1.00 - 1.49	770	639	82	23	3	.	.	.	.	.	1517
1.50 - 1.99	1613	1266	46	1	.	.	.	.	.	.	2926
2.00 - 2.49	119	1201	41	.	.	.	.	.	.	.	1361
2.50 - 2.99	.	236	35	.	.	.	.	.	.	.	271
3.00 - 3.49	.	25	23	.	.	.	.	.	.	.	48
3.50 - 3.99	.	.	5	.	.	.	.	.	.	.	5
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2634	3442	250	27	3	0	3	0	0	0	6359

MEAN HS(M) = 1.76 LARGEST HS(M) = 3.72 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 3723

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 43.61N/124.23W LAT. LON. END= 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	39	323	1108	171	61	42	22	1	13	.	1780
0.50 - 0.99	87	1153	4964	2722	1013	311	71	27	18	.	10366
1.00 - 1.49	68	610	4673	4585	3323	1346	224	22	8	.	14859
1.50 - 1.99	11	272	1339	3785	4368	2542	509	41	.	.	12867
2.00 - 2.49	.	123	273	1079	4324	4597	1245	61	10	.	11712
2.50 - 2.99	.	35	172	366	2368	5590	1921	165	10	.	10627
3.00 - 3.49	.	.	107	133	990	4495	2778	205	1	.	8712
3.50 - 3.99	.	.	35	63	301	2850	2698	237	10	.	6194
4.00 - 4.49	.	.	.	8	109	1187	2736	266	3	.	4307
4.50 - 4.99	.	.	.	.	18	540	4344	1388	3	.	6263
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	205	2525	12671	12912	16875	23500	16548	2383	74	0	51272

MEAN HS(M) = 2.86 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 51272

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 43.61N/124.23W LAT. LON. END = 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	20	107	30	34	0	0	0	0	0	0	157
1.0-1.49	26	124	177	131	0	0	0	0	0	0	341
1.5-1.99	22	100	128	125	65	0	0	0	0	0	301
2.0-2.49	0	77	103	125	22	0	0	0	0	0	268
2.5-2.99	0	54	203	176	220	0	0	0	0	0	782
3.0-3.49	0	1	140	148	193	188	0	0	0	0	759
3.5-3.99	0	0	25	34	143	229	103	0	0	0	666
4.0-4.49	0	0	0	18	68	147	56	0	0	0	297
4.5-4.99	0	0	0	0	34	102	61	0	0	0	157
5.0-5.49	0	0	0	0	77	88	0	0	0	0	165
5.5-5.99	0	0	0	0	0	0	0	0	0	0	0
6.0-6.49	0	0	0	0	0	0	0	0	0	0	0
TOTAL	48	469	1108	885	1189	865	347	6	0	0	2889

MEAN HS(M) = 2.95 LARGEST HS(M) = 7.16 MEAN TP(SEC) = 10.4 NUMBER OF CASES = 2889

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 43.61N/124.23W LAT. LON. END = 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0-5.49	0	0	0	0	0	0	0	0	0	0	0
5.5-5.99	0	0	0	0	0	0	0	0	0	0	0
6.0-6.49	0	0	0	0	0	0	0	0	0	0	0
TOTAL	15	57	0	0	0	0	0	0	0	0	62

MEAN HS(M) = 0.82 LARGEST HS(M) = 2.51 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 45

PHASE 3 ST. 45 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 43.61N/124.23W LAT. LON. END = 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0-5.49	0	0	0	0	0	0	0	0	0	0	0
5.5-5.99	0	0	0	0	0	0	0	0	0	0	0
6.0-6.49	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 45 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 43.61N/124.23W LAT. LON. END = 43.50N/124.26W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	1	2	11	17	6	4	2	1	1	1	1	3
0.50-0.99	20	52	115	178	101	31	2	2	1	1	1	217
1.00-1.49	119	194	522	278	101	31	2	2	1	1	1	1255
1.50-1.99	203	213	500	471	338	135	22	2	1	1	1	1864
2.00-2.49	13	159	156	401	458	256	51	4	1	1	1	1498
2.50-2.99	1	4	51	125	456	459	125	16	1	1	1	1274
3.00-3.49	1	6	33	51	259	577	197	1	1	1	1	1140
3.50-3.99	1	1	18	25	118	472	283	2	1	1	1	896
4.00-4.49	1	1	6	9	44	277	277	2	1	1	1	659
4.50-4.99	1	1	1	2	17	129	279	2	1	1	1	453
5.00+	1	1	1	1	5	61	443	136	1	1	1	645
TOTAL	356	667	1401	1379	1802	2433	1686	235	5	0	0	58440

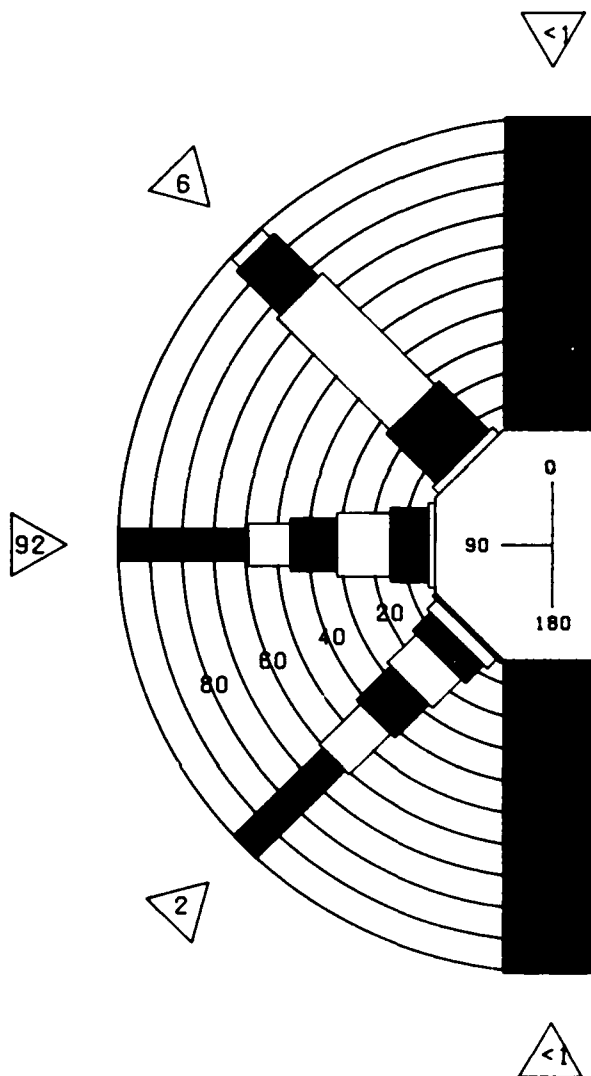
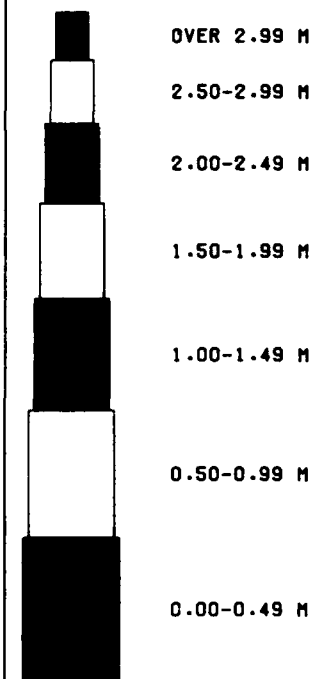
MEAN HS(M) = 2.78 LARGEST HS(M) = 7.17 MEAN TP(SEC) = 11.2 TOTAL CASES = 58440

STATION 45

20 YEARS

SHORELINE ANGLE = 194°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 45 (43.61N/ 124.23W TO 43.50N/ 124.26W)

Y	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1997	3.8	3.7	3.3	2.8	2.1	1.8	1.7	1.6	1.8	2.9	3.7	4.1	
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
2016													
2017													
2018													
2019													
2020													

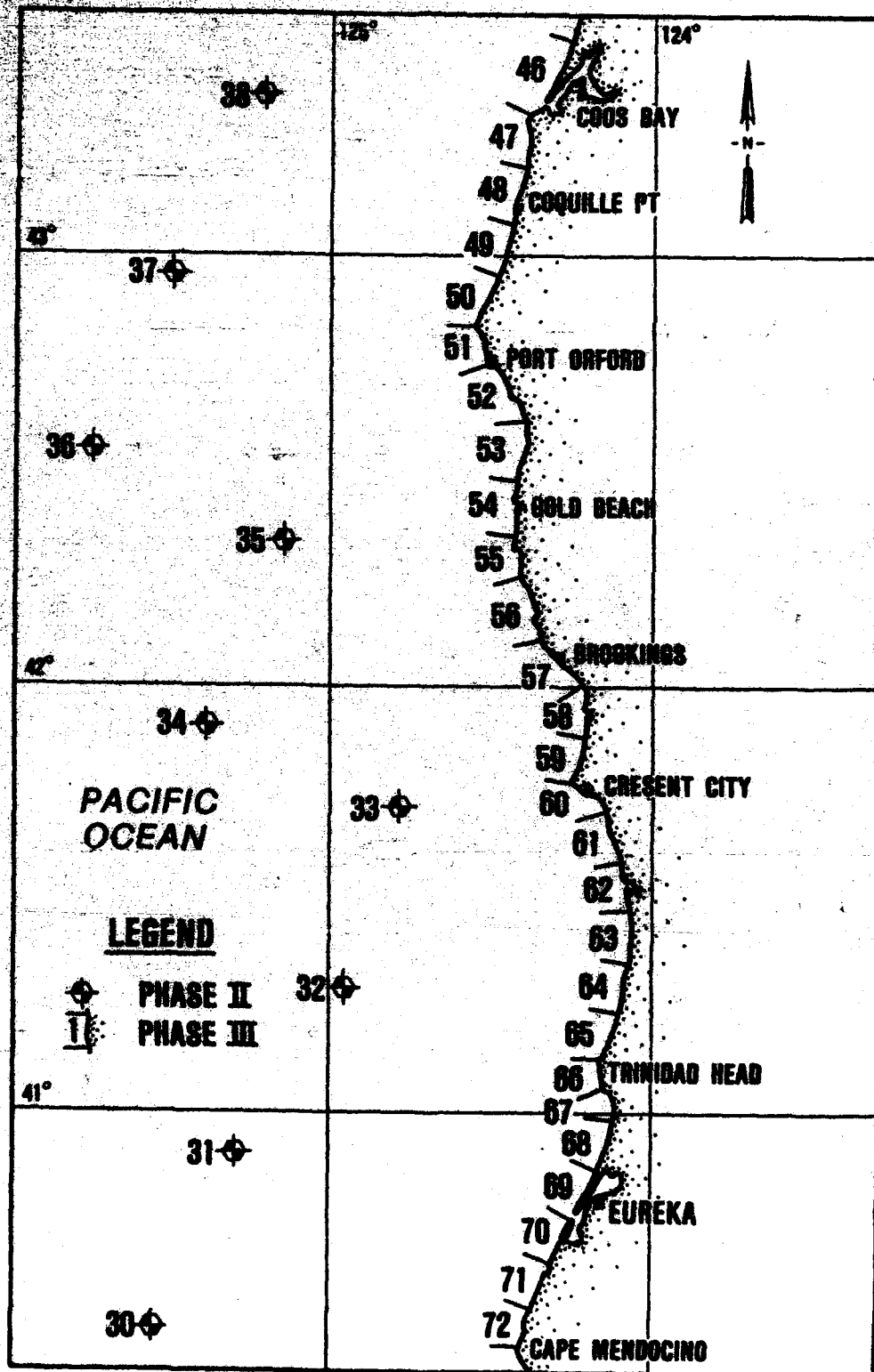
LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 45 (43.61N/ 124.23W TO 43.50N/ 124.26W)

Y	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1997	6.1	5.5	6.1	6.6	6.6	6.1	6.6	6.6	6.6	6.6	6.6	6.6	
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
2016													
2017													
2018													
2019													
2020													

20 YR. STATISTICS FOR PACIFIC STATION 45 (43.61N/ 124.23W TO 43.50N/ 124.26W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	12.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	90-100
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.3
LARGEST WAVE HS	(METERS)	16.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	8.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	73
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		73121318

Appendix C: Sta 46 through 72



PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
 SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49												0
0.50 - 0.99	34	145	99	143	1							282
1.00 - 1.49	5	219	588	423	35	1						1001
1.50 - 1.99	41	160	598	422	20	34						1550
2.00 - 2.49	3	138	396	456	240	193						1639
2.50 - 2.99		63	254	261	288	482						1718
3.00 - 3.49		10	148	188	472	588						1522
3.50 - 3.99		1	75	114	272	501						1173
4.00 - 4.49			8	42	135	314						701
4.50 - 4.99				13	83	136						433
5.00 +				3	11	124						331
TOTAL	83	736	2066	1645	2411	2383	1055	31	0	0		6192

MEAN HS(M) = 2.79 LARGEST HS(M) = 6.85 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 6192

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
 SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	20	32										52
0.50 - 0.99	11	29										40
1.00 - 1.49	8	11	1									20
1.50 - 1.99	1	3	1									5
2.00 - 2.49		1	1									2
2.50 - 2.99												1
3.00 - 3.49												0
3.50 - 3.99												0
4.00 - 4.49												0
4.50 - 4.99												0
5.00 +												0
TOTAL	40	77	3	0	0	0	0	0	0	0		75

MEAN HS(M) = 0.76 LARGEST HS(M) = 2.81 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 75

PHASE 3 ST. 46 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 43.50N/124.26W LAT. LON. END= 43.31N/124.38W
 SHORELINE ANGLE = 207.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	5											5
0.50 - 0.99												0
1.00 - 1.49												0
1.50 - 1.99												0
2.00 - 2.49												0
2.50 - 2.99												0
3.00 - 3.49												0
3.50 - 3.99												0
4.00 - 4.49												0
4.50 - 4.99												0
5.00 +												0
TOTAL	5	0	0	0	0	0	0	0	0	0		5

MEAN HS(M) = 0.22 LARGEST HS(M) = 0.42 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 3

PHASE 3 ST. 46 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START: 43.50N/124.26W LAT. LONG. END: 43.31N/124.28W
 SHORELINE ANGLE = 207.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-22.3- LONGER	TOTAL
0.0-0.49	19	5	10	20	11	11	7	1	1	1	1	6
0.50-0.99	126	183	49	28	134	100	100	100	100	100	100	100
1.00-1.49	245	333	177	103	247	166	166	166	166	166	166	166
1.50-1.99	25	11	17	17	10	10	10	10	10	10	10	10
2.00-2.49	..	..	..	..	..	..	..	..	..	..	..	..
2.50-2.99	..	..	..	..	..	..	..	..	..	..	..	..
3.00-3.49	..	..	..	..	..	..	..	..	..	..	..	..
3.50-3.99	..	..	..	..	..	..	..	..	..	..	..	..
4.00-4.49	..	..	..	..	..	..	..	..	..	..	..	..
4.50-4.99	..	..	..	..	..	..	..	..	..	..	..	..
5.00-5.49	..	..	..	..	..	..	..	..	..	..	..	..
5.50-5.99	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL	418	764	1345	1336	1798	2415	1654	232	2	0	0	58440

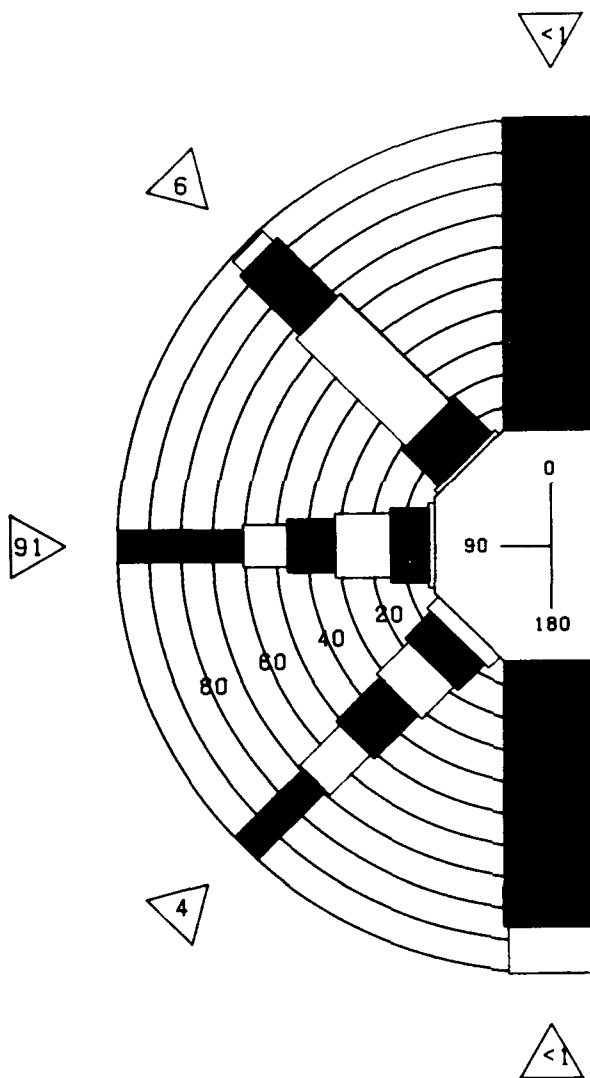
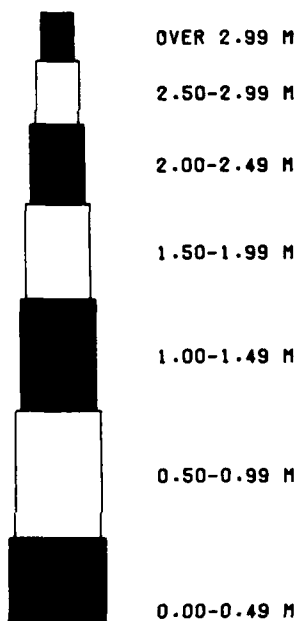
MEAN HS(M) = 2.74 LARGEST HS(M) = 7.05 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440

STATION 46

20 YEARS

SHORELINE ANGLE = 207°

WATER DEPTH = 10 M



PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 43.31N/124.38W LAT. LONG. END= 43.20N/124.40W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METER)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 43.31N/124.38W LAT. LONG. END= 43.20N/124.40W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	100	8	.	.	.	.	.	.	.	.	108
1.00 - 1.49	874	109	.	.	.	.	.	.	.	.	983
1.50 - 1.99	550	742	.	.	.	.	.	.	.	.	1292
2.00 - 2.49	1	109	.	.	.	.	.	.	.	.	110
2.50 - 2.99	.	8	.	.	.	.	.	.	.	.	8
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1525	976	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.54 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1465

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 43.31N/124.38W LAT. LONG. END= 43.20N/124.40W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	.	.	.	.	.	.	.	.	.	9
0.50 - 0.99	99	297	292	27	.	6	3	.	.	.	724
1.00 - 1.49	583	1232	1274	254	44	6	.	.	.	.	3393
1.50 - 1.99	906	1406	781	102	20	1	.	.	.	.	3216
2.00 - 2.49	29	912	242	61	11	.	.	.	.	.	1255
2.50 - 2.99	.	157	71	53	15	5	.	.	.	.	301
3.00 - 3.49	.	13	66	11	13	3	.	.	.	.	106
3.50 - 3.99	.	.	20	3	1	25	.	.	.	.	49
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1618	4017	2751	514	104	46	3	0	0	0	0

MEAN HS(M) = 1.62 LARGEST HS(M) = 3.96 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 5304

PHASE 3 ST. 47 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 43.31N/124.38W LAT. LONG. END= 43.20N/124.40W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

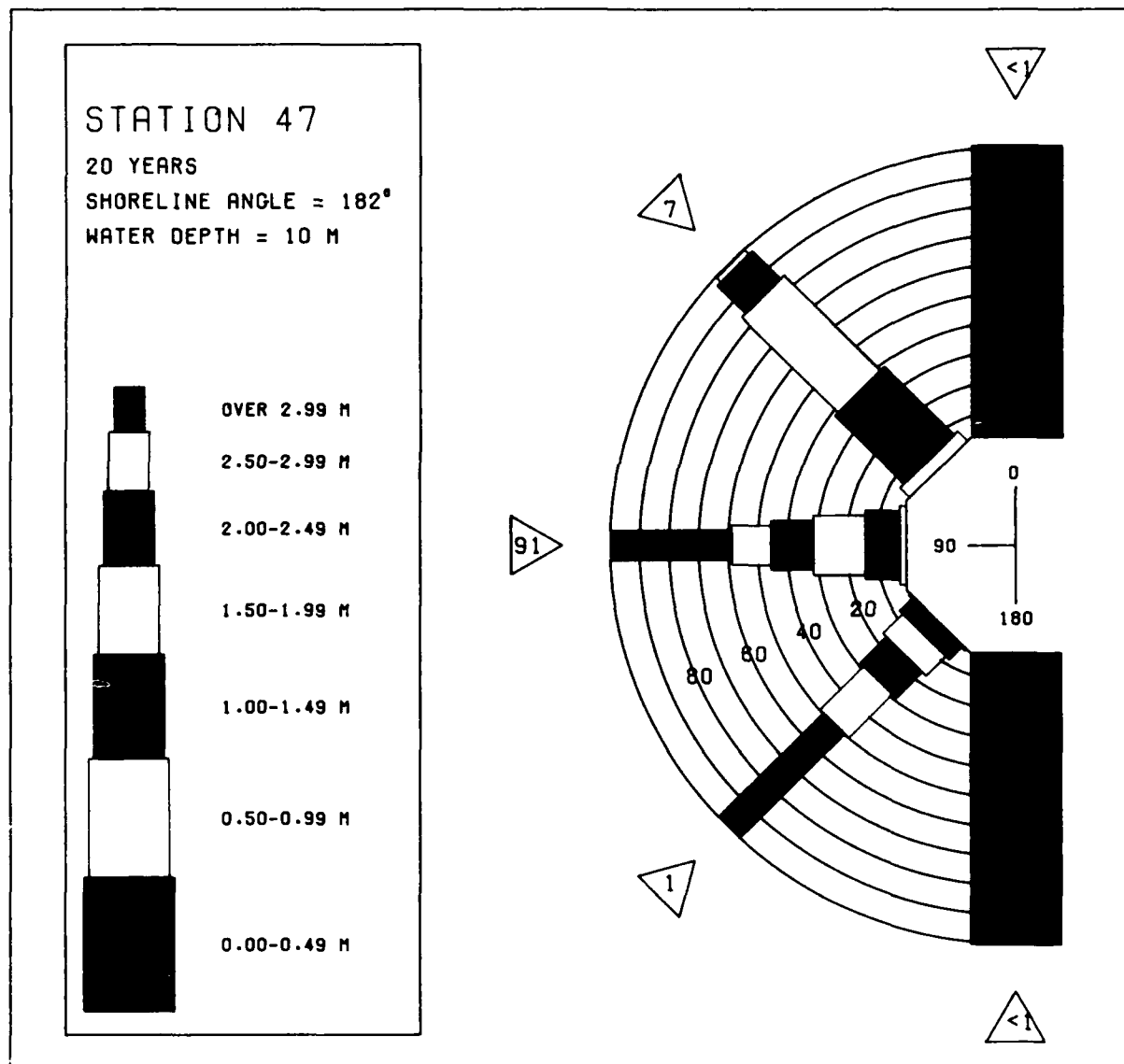
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	29	6	.	.	.	.	.	.	.	.	6
0.50 - 0.99	25	260	833	184	41	17	3	1	22	.	1410
1.00 - 1.49	35	770	3911	2462	1048	343	10	322	5	.	8671
1.50 - 1.99	51	484	4430	4839	3403	1259	27	322	6	.	14721
2.00 - 2.49	5	217	1132	3648	4509	2623	10	322	.	.	12667
2.50 - 2.99	.	131	331	1042	4255	4628	153	73	8	.	11700
3.00 - 3.49	.	23	344	386	2426	5453	1935	124	1	.	10591
3.50 - 3.99	.	3	172	164	1127	4353	2679	195	1	.	8724
4.00 - 4.49	.	.	54	111	369	2833	2674	203	6	.	6250
4.50 - 4.99	.	.	.	44	165	1264	2826	337	1	.	4337
5.00 +	.	.	.	.	68	602	4226	1387	.	.	6288
TOTAL	120	1894	11107	12905	17404	23412	16178	2296	49	0	0

MEAN HS(M) = 2.91 LARGEST HS(M) = 7.70 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49910

PHASE 3 ST. 47 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 43.31N/124.38W LAT. LONG. END= 43.20N/124.40W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	24	59	113	21	4	4	7	2	2	..	..	0
0.5-0.99	150	219	523	272	109	35	21	2	..	..	..	227
1.0-1.49	153	273	533	497	342	126	51	3	..	..	..	1317
1.5-1.99	3	129	147	378	455	263	123	2	..	..	..	1428
2.0-2.49	..	38	56	117	440	465	194	7	..	..	..	1246
2.5-2.99	..	4	45	51	257	551	271	12	..	..	..	1114
3.0-3.49	..	..	26	30	126	450	270	19	..	..	..	922
3.5-3.99	..	..	7	18	52	395	265	20	..	..	..	662
4.0-4.49	..	..	..	7	26	133	427	23	..	..	..	454
4.5-4.99	..	..	..	..	11	70	139	2	..	..	..	647
5.0+	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL	330	722	1450	1391	1822	2392	1629	227	2	0	..	58440

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.70 MEAN TP(SEC)= 11.1 TOTAL CASES = 58440



PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	44	.	.	.	.	.	.	.	.	.	44
1.00 - 1.49	566	53	.	.	.	.	.	.	.	.	619
1.50 - 1.99	431	395	.	.	.	.	.	.	.	.	826
2.00 - 2.49	1	5	.	.	.	.	.	.	.	.	100
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	5
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1942	552	0	0	0	0	0	0	0	0	933

MEAN HS(M) = 1.56 LARGEST HS(M) = 2.86 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 933

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	106	114	54	5	.	.	1	.	.	.	280
1.00 - 1.49	761	877	350	66	20	.	.	.	.	.	2074
1.50 - 1.99	1415	1563	104	5	3	.	.	.	.	.	3090
2.00 - 2.49	92	1237	61	5	.	.	.	.	.	.	1395
2.50 - 2.99	.	210	51	3	.	.	.	.	.	.	264
3.00 - 3.49	.	22	41	.	.	.	.	.	.	.	63
3.50 - 3.99	.	.	13	.	.	.	.	.	.	.	13
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2374	4023	674	84	23	0	1	0	0	0	4202

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.72 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 4202

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	15	36	1	200	39	39	5	1	17	.	1652
1.00 - 1.49	58	983	22	2501	1309	345	75	23	8	.	9526
1.50 - 1.99	66	4873	4581	3302	1220	1220	201	27	.	.	14923
2.00 - 2.49	10	254	1457	3723	4409	2522	1497	22	.	.	12894
2.50 - 2.99	.	142	294	1185	4348	4655	1213	171	5	.	11910
3.00 - 3.49	.	25	179	133	2539	5477	1950	121	3	.	10677
3.50 - 3.99	.	3	148	138	1045	4491	2660	191	1	.	8577
4.00 - 4.49	.	.	35	82	302	2830	2710	207	6	.	6172
4.50 - 4.99	.	.	.	27	128	1223	2626	236	3	.	4243
5.00 +	.	.	.	35	35	549	4247	1418	.	.	6252
TOTAL	170	2302	12492	12923	17147	23348	16184	2317	51	0	50829

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.45 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 50829

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	11	73	15	.	.	.	.	.	.	0
0.5 - 0.99	5	112	123	13	27	5	.	.	.	253	
1.0 - 1.49	29	118	179	111	131	11	.	.	.	469	
1.5 - 1.99	.	77	148	179	169	11	.	.	.	546	
2.0 - 2.49	.	68	212	114	149	1	.	.	.	613	
2.5 - 2.99	.	10	176	130	203	23	.	.	.	622	
3.0 - 3.49	.	.	70	136	183	42	.	.	.	621	
3.5 - 3.99	.	.	20	68	167	159	.	.	.	461	
4.0 - 4.49	.	.	.	23	78	63	.	.	.	222	
4.5 - 4.99	.	.	.	.	42	58	.	.	.	201
TOTAL	45	459	943	775	1000	722	220	3	0	0	

MEAN HS(M) = 3.08 LARGEST HS(M) = 7.23 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2450

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	3	28	.	.	.	.	.	.	.	11
0.5 - 0.99	6	1	.	.	.	.	.	.	.	28
1.0 - 1.49	.	.	.	.	.	.	.	.	.	0
1.5 - 1.99	.	.	.	.	.	.	.	.	.	0
2.0 - 2.49	.	.	.	.	.	.	.	.	.	0
2.5 - 2.99	.	.	.	.	.	.	.	.	.	0
3.0 - 3.49	.	.	.	.	.	.	.	.	.	0
3.5 - 3.99	.	.	.	.	.	.	.	.	.	0
4.0 - 4.49	.	.	.	.	.	.	.	.	.	0
4.5 - 4.99	.	.	.	.	.	.	.	.	.	0
TOTAL	10	31	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.69 LARGEST HS(M) = 1.49 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 26

PHASE 3 ST. 48 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

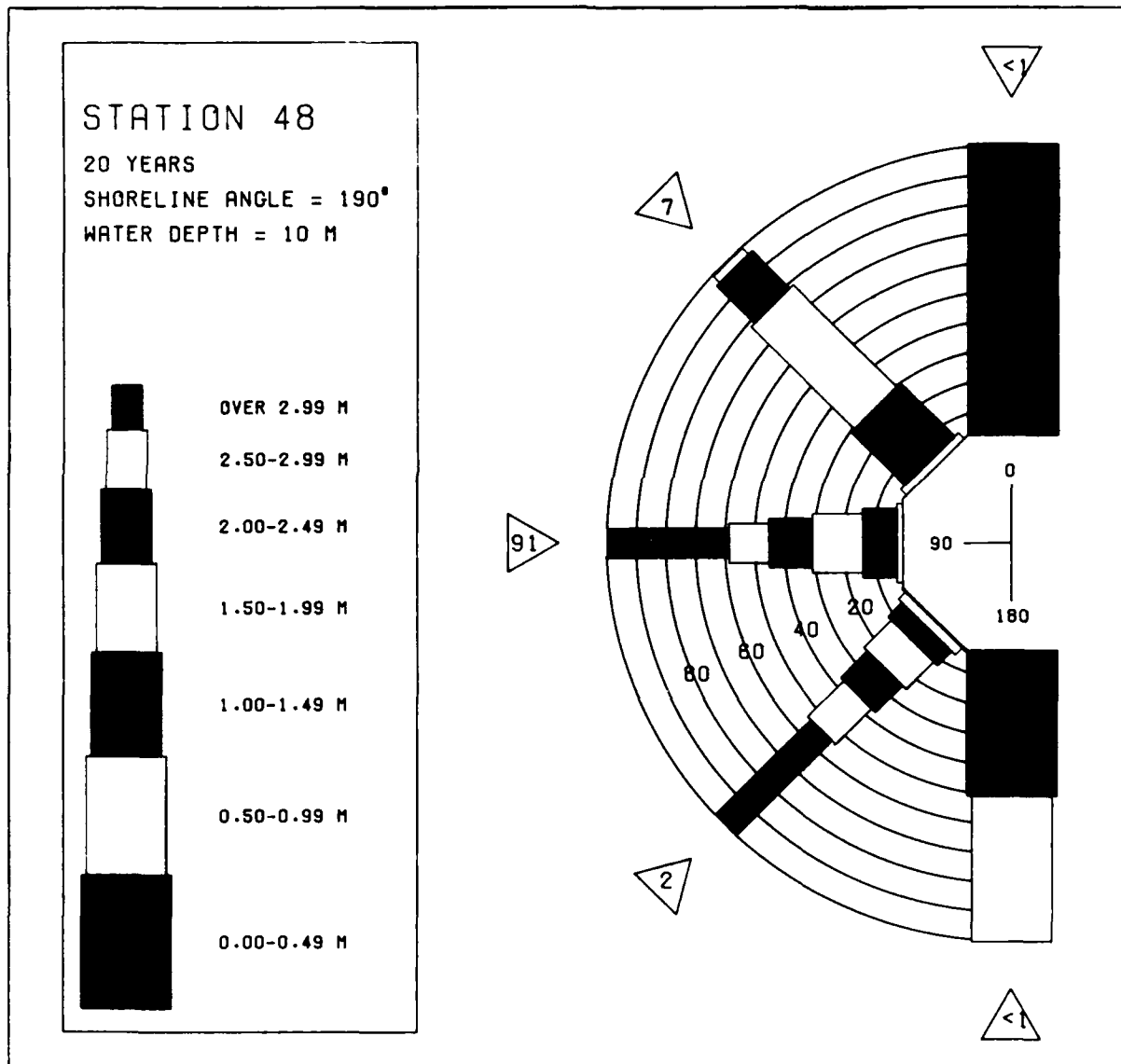
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	0	
0.5 - 0.99	0	
1.0 - 1.49	0	
1.5 - 1.99	0	
2.0 - 2.49	0	
2.5 - 2.99	0	
3.0 - 3.49	0	
3.5 - 3.99	0	
4.0 - 4.49	0	
4.5 - 4.99	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 48 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 43.20N/124.40W LAT. LON. END= 43.08N/124.45W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	20	55	105	20	3	3	7	2	1	1	1	207
0.50-0.99	139	203	499	253	103	34	20	2	1	1	1	1245
1.00-1.49	194	262	515	479	333	122	49	2	1	1	1	1927
1.50-1.99	10	166	166	396	454	253	121	2	1	1	1	1490
2.00-2.49	..	5	5	130	251	470	137	1	1	1	1	1276
2.50-2.99	..	..	23	357	124	56	197	1	1	1	1	1139
3.00-3.49	..	..	5	15	12	45	270	1	1	1	1	929
3.50-3.99	..	..	..	5	47	98	275	1	1	1	1	680
4.00-4.49	..	..	..	..	20	128	429	1	1	1	1	444
4.50-4.99	..	..	..	..	7	65	268	1	1	1	1	444
5.00-5.49	..	..	..	..	..	..	429	1	1	1	1	643
TOTAL	363	734	1407	1375	1814	2402	1636	1429	229	1	0	58440

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.45 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 48 (43.20N/ 124.40W TO 43.08N/ 124.45W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	3.8	3.7	3.4	2.8	2.1	1.8	1.7	1.6	1.8	2.8	3.7	4.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 48 (43.20N/ 124.40W TO 43.08N/ 124.45W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

20 YR. STATISTICS FOR PACIFIC STATION 48 (43.20N/ 124.40W TO 43.08N/ 124.45W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.5
LARGEST WAVE HS	(METERS)	14.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	9.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121115

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	6	0	0	0	0	0	0	0	0	0	6
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	0	0	0	0	0	0	0	0	0	6

MEAN HS(M) = 0.03 LARGEST HS(M) = 0.05 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 4

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	34	5	0	0	0	0	0	0	0	0	39
0.50 - 0.99	564	54	0	0	0	0	0	0	0	0	618
1.00 - 1.49	501	102	0	0	0	0	0	0	0	0	603
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1102	580	0	0	0	0	0	0	0	0	1682

MEAN HS(M) = 1.58 LARGEST HS(M) = 2.49 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 985

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	121	116	26	1	0	0	0	0	0	0	264
0.50 - 0.99	896	778	188	15	3	0	0	0	0	0	1880
1.00 - 1.49	1707	1997	588	3	0	0	0	0	0	0	4295
1.50 - 1.99	107	1623	58	3	0	0	0	0	0	0	1831
2.00 - 2.49	0	244	63	0	0	0	0	0	0	0	307
2.50 - 2.99	0	35	20	0	0	0	0	0	0	0	55
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2831	4795	485	22	3	0	0	0	0	0	8136

MEAN HS(M) = 1.77 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 4761

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	25	385	881	150	34	27	1	5	11	0	1519
0.50 - 0.99	63	982	4346	2223	3112	369	125	196	15	0	8999
1.00 - 1.49	92	4787	4469	4469	4432	1125	196	30	1	0	14474
1.50 - 1.99	22	331	1302	3788	4432	2500	1460	18	1	0	12744
2.00 - 2.49	0	198	333	1317	4432	4440	1069	83	13	0	11878
2.50 - 2.99	0	20	179	1266	2412	5627	1848	121	1	0	10873
3.00 - 3.49	0	0	30	83	1023	4330	3534	188	1	0	8366
3.50 - 3.99	0	0	3	39	109	1143	2671	169	5	0	6070
4.00 - 4.49	0	0	0	1	30	547	4002	1409	0	0	4156
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	589
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	202	2581	12013	12578	16718	22804	15616	2231	37	0	49568

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.44 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 49568

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0. - 0.49						0
0.5 - 0.99	22	90	143			130
1.0 - 1.49	3	138	145			326
1.5 - 1.99	30	157	227	53		654
2.0 - 2.49		109	208	203		731
2.5 - 2.99		88	124	169	46	813
3.0 - 3.49		17	193	215	100	872
3.5 - 3.99			94	213	236	737
4.0 - 4.49			20	176	150	470
4.5 - 4.99				78	85	244
5.0 +				39	71	244
TOTAL	55	600	1172	938	1218	3066

MEAN HS(M) = 2.99 LARGEST HS(M) = 7.44 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 3066

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0. - 0.49						0
0.5 - 0.99	22	230	5			51
1.0 - 1.49	3	5				33
1.5 - 1.99	1		1			7
2.0 - 2.49						0
2.5 - 2.99						0
3.0 - 3.49						0
3.5 - 3.99						0
4.0 - 4.49						0
4.5 - 4.99						0
5.0 +						0
TOTAL	26	59	7	0	0	56

MEAN HS(M) = 0.55 LARGEST HS(M) = 1.64 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 56

PHASE 3 ST. 49 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 43.08N/124.45W LAT. LON. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

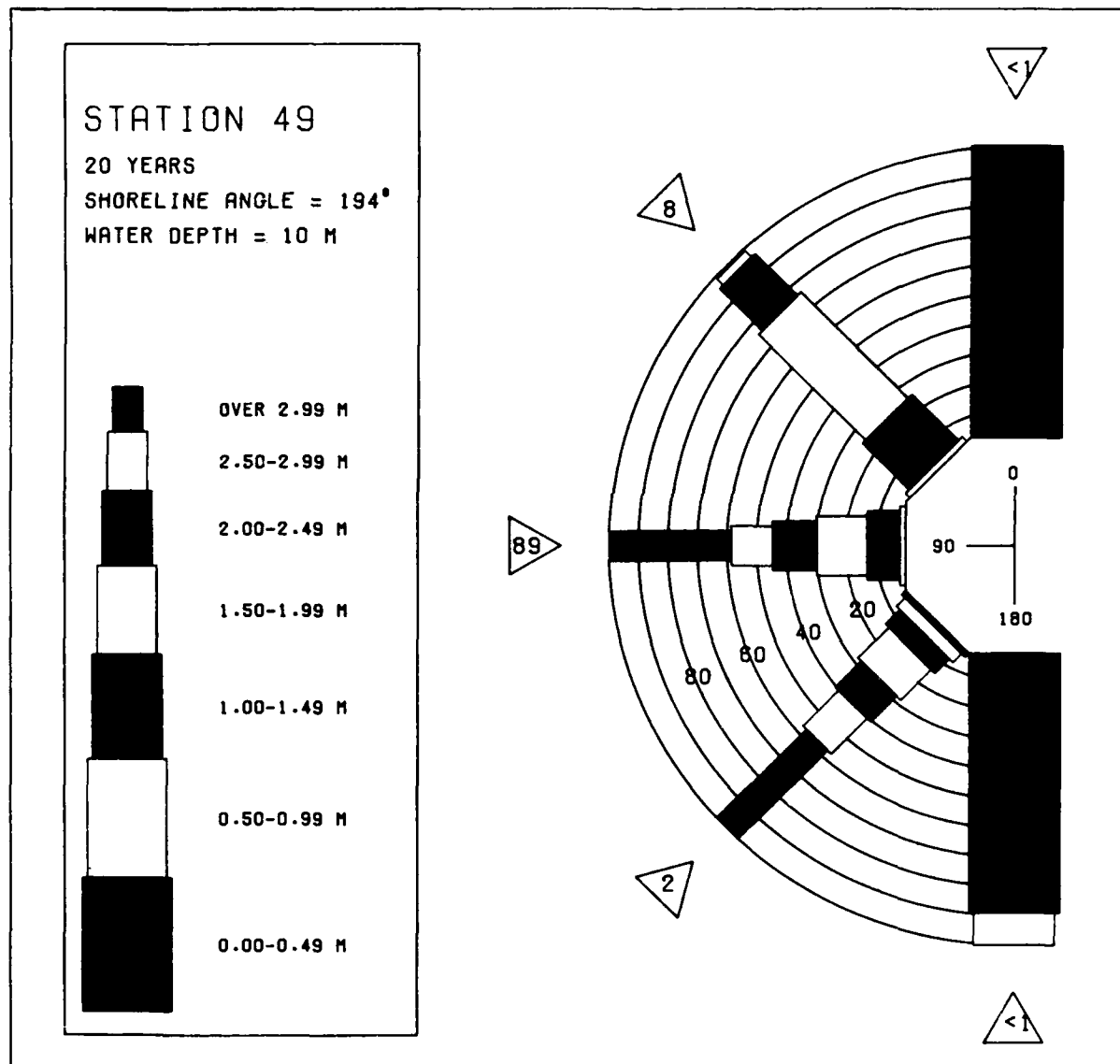
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6- 11.7 11.8- 13.3 13.4- 15.3 15.4- 18.1 18.2- 22.2 22.3- LONGER	TOTAL
0. - 0.49						0
0.5 - 0.99						0
1.0 - 1.49						0
1.5 - 1.99						0
2.0 - 2.49						0
2.5 - 2.99						0
3.0 - 3.49						0
3.5 - 3.99						0
4.0 - 4.49						0
4.5 - 4.99						0
5.0 +						0
TOTAL	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 49 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 43.08N/124.45W LAT. LONG. END= 42.96N/124.48W
 SHORELINE ANGLE = 194.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.4	6.1-8.1	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
10.0	1	1	1	1	1	1	1	1	1	1	1
9.5	1	1	1	1	1	1	1	1	1	1	1
9.0	1	1	1	1	1	1	1	1	1	1	1
8.5	1	1	1	1	1	1	1	1	1	1	1
8.0	1	1	1	1	1	1	1	1	1	1	1
7.5	1	1	1	1	1	1	1	1	1	1	1
7.0	1	1	1	1	1	1	1	1	1	1	1
6.5	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1
5.5	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1
4.5	1	1	1	1	1	1	1	1	1	1	1
4.0	1	1	1	1	1	1	1	1	1	1	1
3.5	1	1	1	1	1	1	1	1	1	1	1
3.0	1	1	1	1	1	1	1	1	1	1	1
2.5	1	1	1	1	1	1	1	1	1	1	1
2.0	1	1	1	1	1	1	1	1	1	1	1
1.5	1	1	1	1	1	1	1	1	1	1	1
1.0	1	1	1	1	1	1	1	1	1	1	1
0.5	1	1	1	1	1	1	1	1	1	1	1
0.0	1	1	1	1	1	1	1	1	1	1	1
TOTAL	420	859	1365	1351	1790	2372	1565	218	2	0	58440

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.44 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 49 (43.08N/ 124.45W TO 42.96N/ 124.48W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	3.8	3.7	3.4	2.8	2.1	1.8	1.7	1.6	1.8	2.8	3.7	4.1	
1976													
1977													
1978													
1979													
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2013													
2014													
2015													
2016													
2017													
2018													
2019													
2020													

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 49 (43.08N/ 124.45W TO 42.96N/ 124.48W)

YEAR	MONTH												LARGEST HS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	
1976													
1977													
1978													
1979													
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2014													
2015													
2016													
2017													
2018													
2019													
2020													

20 YR. STATISTICS FOR PACIFIC STATION 49 (43.08N/ 124.45W TO 42.96N/ 124.48W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.8
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90-110
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.0
LARGEST WAVE HS	(METERS)	7.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	94.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121206

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 42.96N/124.48W LAT. LONG. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 42.96N/124.48W LAT. LONG. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	8
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	6
1.00 - 1.49	138	13	.	.	.	.	.	.	.	.	151
1.50 - 1.99	66	106	.	.	.	.	.	.	.	.	172
2.00 - 2.49	.	23	.	.	.	.	.	.	.	.	23
2.50 - 2.99	.	3	.	.	.	.	.	.	.	.	3
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	218	144	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.69 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 214

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 42.96N/124.48W LAT. LONG. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	118	35	3	.	.	.	.	.	.	.	156
1.00 - 1.49	1091	388	11	.	.	.	.	.	.	.	1490
1.50 - 1.99	2390	1820	11	.	.	.	.	.	.	.	4221
2.00 - 2.49	193	1926	29	.	.	.	.	.	.	.	2148
2.50 - 2.99	.	352	49	.	.	.	.	.	.	.	401
3.00 - 3.49	.	59	58	.	.	.	.	.	.	.	117
3.50 - 3.99	.	.	10	.	.	.	.	.	.	.	10
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3792	4580	171	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.84 LARGEST HS(M) = 3.84 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 4998

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 42.96N/124.48W LAT. LONG. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	12
0.50 - 0.99	43	3	888	152	32	27	5	3	11	.	1581
1.00 - 1.49	165	1213	4255	2215	949	1161	73	18	5	.	9261
1.50 - 1.99	200	864	4395	4161	3047	1161	198	32	1	.	14059
2.00 - 2.49	29	448	1225	3603	4164	2535	1482	18	1	.	12505
2.50 - 2.99	.	203	1252	4426	4250	4426	1170	92	13	.	11660
3.00 - 3.49	.	22	145	270	2171	5516	1829	128	1	.	10081
3.50 - 3.99	.	.	152	85	835	4117	2597	191	1	.	7980
4.00 - 4.49	.	.	29	56	231	2351	2703	177	6	.	5553
4.50 - 4.99	.	.	1	30	59	917	2614	1301	.	.	3821
5.00 +	.	.	.	.	11	347	3521	1370	.	.	5249
TOTAL	443	3167	11341	11832	15748	21769	15192	2232	38	0	0

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.21 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 47805

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	23	123	44	1	1	1	1	1	1	1	
0.50 - 0.99	6	239	407	119	23	11	1	1	1	1	
1.00 - 1.49	41	201	412	311	165	15	1	1	1	1	
1.50 - 1.99	6	167	318	422	530	179	6	1	1	1	
2.00 - 2.49	1	92	231	254	333	352	46	1	1	1	
2.50 - 2.99	1	15	177	201	313	456	147	1	1	1	
3.00 - 3.49	1	1	82	135	133	468	136	1	1	1	
3.50 - 3.99	1	1	8	39	130	290	162	1	1	1	
4.00 - 4.49	1	1	1	22	85	172	142	1	1	1	
4.50 - 4.99	1	1	1	1	23	159	159	1	1	1	
5.00 +	76	838	1680	1495	2110	2102	798	22	0	0	

MEAN HS(M) = 2.87 LARGEST HS(M) = 6.71 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 5348

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	22	32	5	1	1	1	1	1	1	1	
0.50 - 0.99	1	25	13	1	1	1	1	1	1	1	
1.00 - 1.49	1	5	3	1	1	1	1	1	1	1	
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	
5.00 +	27	71	22	0	0	0	0	0	0	0	

MEAN HS(M) = 0.76 LARGEST HS(M) = 2.38 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 74

PHASE 3 ST. 50 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	1	1	1	1	1	1	1	1	1	1	
0.50 - 0.99	1	1	1	1	1	1	1	1	1	1	
1.00 - 1.49	1	1	1	1	1	1	1	1	1	1	
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	
5.00 +	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.49 LARGEST HS(M) = 0.49 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 50 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 42.96N/124.48W LAT. LON. END= 42.83N/124.56W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.00-	3	3	94	15	3	2	7	1	1	1	6
0.50-	20	59	94	15	3	2	7	1	1	1	194
1.00-	140	186	468	233	97	38	19	1	1	1	1170
1.50-	270	289	482	447	321	117	19	1	1	1	1958
2.00-	22	257	157	401	456	271	48	1	1	1	1613
2.50-	..	65	53	150	478	477	121	1	1	1	1354
3.00-	..	9	38	147	260	597	197	1	1	1	1160
3.50-	..	..	24	22	114	458	273	1	1	1	910
4.00-	..	..	3	5	36	264	286	1	1	1	615
4.50-	..	..	..	..	14	109	275	1	1	1	423
5.00+	..	..	..	..	3	50	368	1	1	1	560
TOTAL	455	878	1319	1329	1782	2383	1594	221	2	0	58440

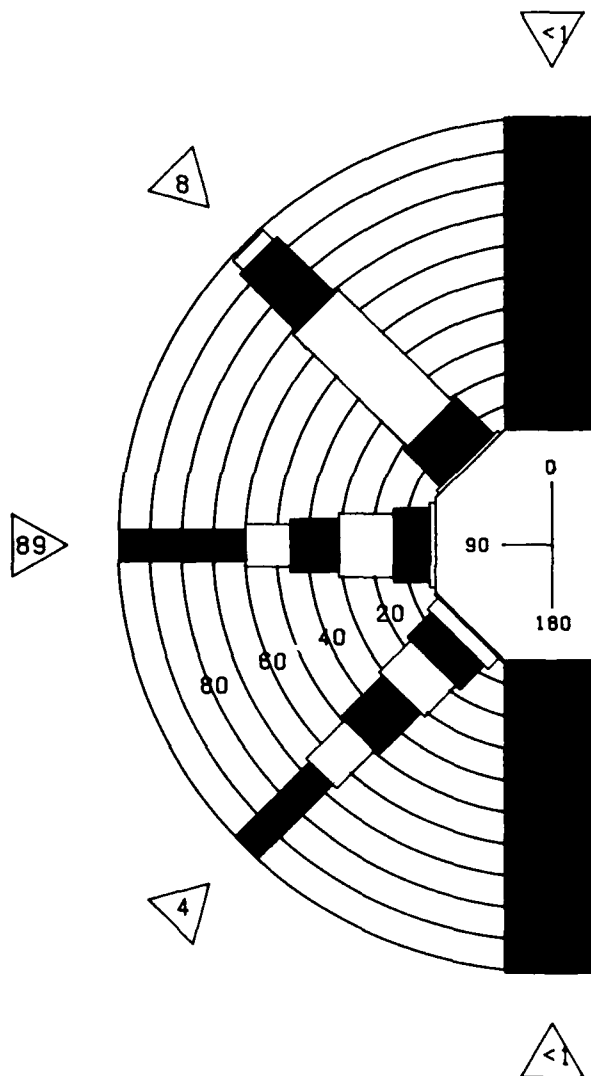
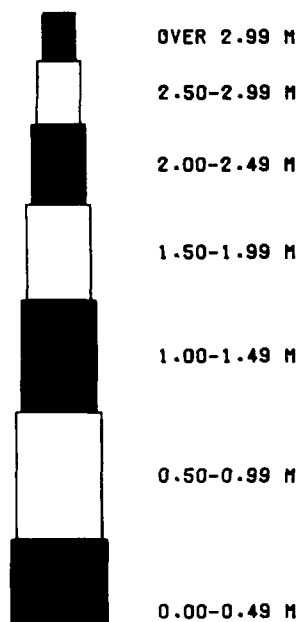
MEAN HS(M) = 2.75 LARGEST HS(M) = 7.21 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440

STATION 50

20 YEARS

SHORELINE ANGLE = 205°

WATER DEPTH = 10 M



WIS STATION 50 (42.96N/ 124.48W TO 42.83N/ 124.56W)

[illegible]

WIS STATION 50 (42.96N/ 124.48W TO 42.83N/ 124.56W)

20 YR. STATISTICS FOR PACIFIC STATION 50 (42.96N/ 124.48W TO 42.83N/ 124.56W)

69121215

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 42.83N/124.56W LAT. LON. END = 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 42.83N/124.56W LAT. LON. END = 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	630	80	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	8
0.50 - 0.99	479	167	.	.	.	.	.	.	.	.	64
1.00 - 1.49	1464	1380	8	.	.	.	.	.	.	.	2853
1.50 - 1.99	284	1023	10	.	.	.	.	.	.	.	1322
2.00 - 2.49	.	77	10	.	.	.	.	.	.	.	87
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2230	2652	35	0	0	0	0	0	0	0	2876

MEAN HS(M) = 1.34 LARGEST HS(M) = 2.31 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 2876

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 42.83N/124.56W LAT. LON. END = 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	29	6	5	5	68	1	.	.	.	49
0.50 - 0.99	46	710	1440	325	59	68	1	.	.	.	2650
1.00 - 1.49	135	1827	6040	2636	990	390	95	1	.	.	12164
1.50 - 1.99	164	790	3577	4253	2830	1076	154	.	.	.	13024
2.00 - 2.49	3	422	518	2178	3886	1947	205	.	.	.	9159
2.50 - 2.99	.	104	207	424	2125	3307	467	.	.	.	6634
3.00 - 3.49	.	1	114	100	893	2626	913	.	.	.	4647
3.50 - 3.99	.	.	59	53	277	1651	990	.	.	.	3030
4.00 - 4.49	.	.	10	25	71	773	1204	.	.	.	2083
4.50 - 4.99	.	.	.	3	23	282	747	.	.	.	1055
5.00 +	.	.	.	.	1	94	720	.	.	.	815
TOTAL	349	3883	12151	10055	11155	12219	5496	2	0	0	32341

MEAN HS(M) = 2.24 LARGEST HS(M) = 6.69 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 32341

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 42.83N/124.56W LAT. LON. END = 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	25	152	133	37	6	3	.	3	15	.	374
0.50 - 0.99	5	302	749	638	485	172	20	20	1	.	2392
1.00 - 1.49	41	232	889	1220	1124	472	130	27	1	.	4136
1.50 - 1.99	1	177	345	860	1182	1211	405	42	.	.	4223
2.00 - 2.49	.	171	349	385	1353	2008	908	106	13	.	5293
2.50 - 2.99	.	53	326	309	922	2149	1283	155	.	.	5197
3.00 - 3.49	.	5	242	217	686	1978	1558	183	6	.	4875
3.50 - 3.99	.	.	73	229	455	1420	1663	176	.	.	4016
4.00 - 4.49	.	.	11	107	270	746	1510	268	.	.	2912
4.50 - 4.99	.	.	.	11	140	631	2541	1184	.	.	4507
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	72	1092	3117	4013	6623	10790	10018	2164	36	0	22184

MEAN HS(M) = 3.33 LARGEST HS(M) = 7.76 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 22184

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	.	.	.	.	.	.	.	.	.	.	0
1.00-1.49	10	34	.	.	.	.	.	.	.	.	.	35
1.50-1.99	10	42	.	.	.	.	.	.	.	.	.	77
2.00-2.49	3	73	25	18	15	10	.	.	.	.	.	149
2.50-2.99	1	83	169	39	59	15	.	.	.	.	.	344
3.00-3.49	.	51	130	35	69	47	.	.	.	.	.	394
3.50-3.99	.	11	99	124	68	51	.	.	.	.	.	424
4.00-4.49	.	.	32	77	83	70	1	.	.	.	.	464
4.50-4.99	.	.	.	34	87	51	17	.	.	.	.	469
5.00+	.	.	.	.	.	.	.	.	.	.	.	165
TOTAL	15	294	476	368	368	195	18	0	0	0	0	

MEAN HS(M) = 3.54 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 1025

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	1	3	.	.	.	.	.	.	.	.	.	14
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	10	11	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.66 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 14

PHASE 3 ST. 51 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 51 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 42.83N/124.56W LAT. LON. END= 42.73N/124.51W
 SHORELINE ANGLE = 162.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	55	103	157	36	6	7	11	2	1	1	365
0.50-0.99	161	354	679	332	147	56	11	2	1	1	1742
1.00-1.49	50	209	469	347	395	154	28	2	1	1	1854
1.50-1.99	1	75	94	305	507	316	61	4	1	1	1363
2.00-2.49	1	35	67	84	188	531	137	10	1	1	1214
2.50-2.99	1	10	58	48	102	479	219	15	1	1	1017
3.00-3.49	1	1	40	39	59	363	254	18	1	1	817
3.50-3.99	1	1	11	33	37	224	286	17	1	1	630
4.00-4.49	1	1	1	14	21	107	326	26	1	1	411
4.50-4.99	1	1	1	1	1	79	327	118	1	1	546
TOTAL	267	790	1576	1439	1811	2315	1549	212	2	0	58440

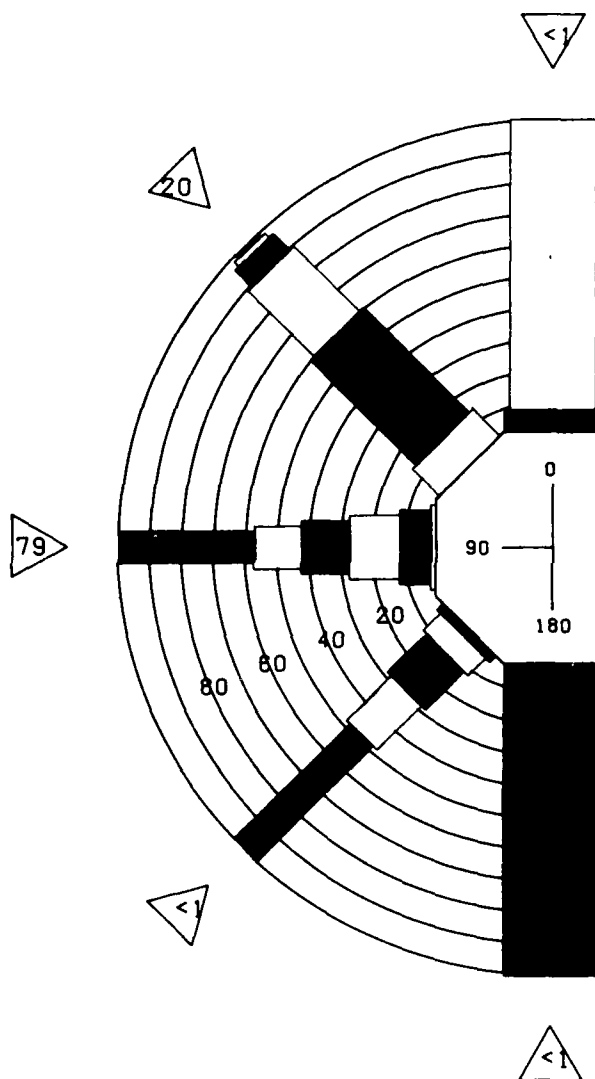
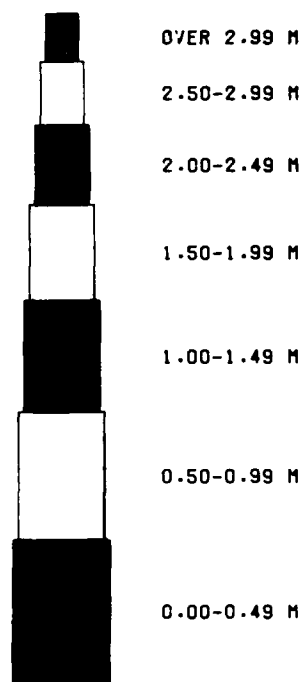
MEAN HS(M) = 2.63 LARGEST HS(M) = 7.76 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440

STATION 51

20 YEARS

SHORELINE ANGLE = 162°

WATER DEPTH = 10 M



MONTH

MEAN

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 51 (42.83N/ 124.56W TO 42.73N/ 124.51W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.4
LARGEST WAVE HS	(METERS)	7.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	90.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121115

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE= 148.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	11										11
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	11	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 7

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE= 148.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	18	11	5								204
0.50 - 0.99	18	11	5								204
1.00 - 1.49	18	11	5								204
1.50 - 1.99	18	11	5								204
2.00 - 2.49	18	11	5								204
2.50 - 2.99	18	11	5								204
3.00 - 3.49	18	11	5								204
3.50 - 3.99	18	11	5								204
4.00 - 4.49	18	11	5								204
4.50 - 4.99	18	11	5								204
5.00 +	18	11	5								204
TOTAL	2129	3544	135	0	0	0	0	0	0	0	3398

MEAN HS(M) = 1.07 LARGEST HS(M) = 2.21 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 3398

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE= 148.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	3	3	3	3	3	3	3	3	3	101
0.50 - 0.99	3	3	3	3	3	3	3	3	3	3	101
1.00 - 1.49	3	3	3	3	3	3	3	3	3	3	101
1.50 - 1.99	3	3	3	3	3	3	3	3	3	3	101
2.00 - 2.49	3	3	3	3	3	3	3	3	3	3	101
2.50 - 2.99	3	3	3	3	3	3	3	3	3	3	101
3.00 - 3.49	3	3	3	3	3	3	3	3	3	3	101
3.50 - 3.99	3	3	3	3	3	3	3	3	3	3	101
4.00 - 4.49	3	3	3	3	3	3	3	3	3	3	101
4.50 - 4.99	3	3	3	3	3	3	3	3	3	3	101
5.00 +	3	3	3	3	3	3	3	3	3	3	101
TOTAL	187	4208	14234	12650	15115	18527	10459	1667	3	0	45049

MEAN HS(M) = 2.23 LARGEST HS(M) = 7.09 MEAN TP(SEC) = 11.2 NUMBER OF CASES = 45049

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE= 148.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	11	41	23								80
0.50 - 0.99	11	41	23								80
1.00 - 1.49	11	41	23								80
1.50 - 1.99	11	41	23								80
2.00 - 2.49	11	41	23								80
2.50 - 2.99	11	41	23								80
3.00 - 3.49	11	41	23								80
3.50 - 3.99	11	41	23								80
4.00 - 4.49	11	41	23								80
4.50 - 4.99	11	41	23								80
5.00 +	11	41	23								80
TOTAL	91	832	1906	1818	2532	3806	4329	306	57	0	9283

MEAN HS(M) = 3.62 LARGEST HS(M) = 7.98 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 9283

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	10	.	.	.	.	.	.	.	10
1.0-1.49	11	49	3	.	.	.	.	.	.	71
1.5-1.99	10	106	200	15	.	.	.	.	.	352
2.0-2.49	.	104	128	107	10	3	.	.	.	444	
2.5-2.99	.	30	97	49	41	1	.	.	.	209	
3.0-3.49	.	.	82	33	25	10	.	.	.	177	
3.5-3.99	.	.	17	11	3	8	.	.	.	45	
4.0-4.99	.	.	3	.	.	.	.	.	.	5
5.0-5.99	.	.	.	.	.	.	.	.	.	0
6.0-6.99	.	.	.	.	.	.	.	.	.	0
TOTAL	22	307	392	201	184	67	10	0	0	702	

MEAN HS(M) = 3.22 LARGEST HS(M) = 6.77 MEAN TP(SEC) = 9.1 NUMBER OF CASES = 702

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	
0.5-0.99	1	.	.	.	.	.	.	.	.	1
1.0-1.49	0	
1.5-1.99	0	
2.0-2.49	0	
2.5-2.99	0	
3.0-3.49	0	
3.5-3.99	0	
4.0-4.99	0	
5.0-5.99	0	
6.0-6.99	0	
TOTAL	1	0	0	0	0	0	0	0	0	1	

MEAN HS(M) = 0.65 LARGEST HS(M) = 0.65 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 1

PHASE 3 ST. 52 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

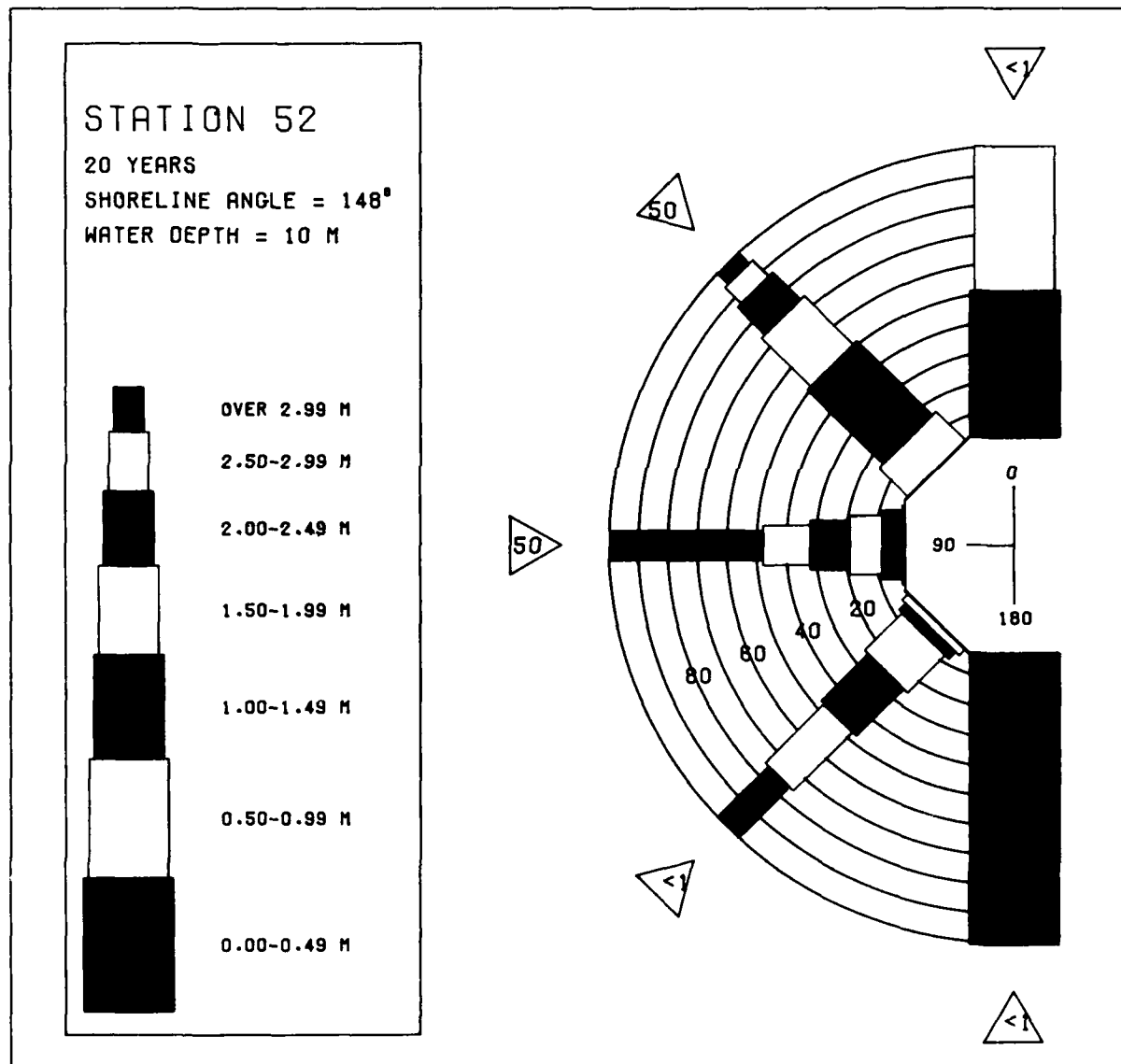
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	
0.5-0.99	0	
1.0-1.49	0	
1.5-1.99	0	
2.0-2.49	0	
2.5-2.99	0	
3.0-3.49	0	
3.5-3.99	0	
4.0-4.99	0	
5.0-5.99	0	
6.0-6.99	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 52 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 42.73N/124.51W LAT. LON. END= 42.61N/124.40W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.3-	15.4-	18.2-	22.3-	TOTAL
0.0-0.49	61	81	95	105	117	133	153	181	222	LONGER	28
0.50-0.99	97	122	133	176	253	238	338	411	511	611	743
1.00-1.49	105	128	152	205	251	238	338	411	511	611	2133
1.50-1.99	253	352	411	501	517	444	536	611	715	811	1715
2.00-2.49	3	81	80	174	434	444	536	611	715	811	1325
2.50-2.99	3	42	74	66	255	238	338	411	511	611	1179
3.00-3.49	3	122	69	44	122	101	100	14	1	1	919
3.50-3.99	3	122	49	47	66	238	274	19	1	1	715
4.00-4.49	3	122	15	37	47	143	235	26	3	3	503
4.50-4.99	3	122	2	18	35	72	166	34	3	3	311
5.00+	3	122	2	18	35	72	166	34	3	3	378
TOTAL	243	887	1664	1462	1778	2233	1474	210	3	0	

MEAN HS(M) = 2.40 LARGEST HS(M) = 7.98 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	11	.	.	.	.	.	.	.	.	.	11
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	11	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.03 LARGEST HS(M) = 0.07 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 7

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	65	71	20	6	5	3	.	.	.	.	166
0.50 - 0.99	544	768	200	104	5	.	.	.	.	.	1189
1.00 - 1.49	930	2337	1299	109	44	.	.	.	.	.	3639
1.50 - 1.99	183	1006	529	104	37	.	.	.	.	.	1569
2.00 - 2.49	1	246	99	49	5	.	.	.	.	.	300
2.50 - 2.99	.	34	27	15	3	.	.	.	.	.	79
3.00 - 3.49	.	.	5	1	1	.	.	.	.	.	3
3.50 - 3.99	.	.	.	.	5	.	.	.	.	.	5
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1743	4462	2221	396	207	76	0	0	0	0	5333

MEAN HS(M) = 1.38 LARGEST HS(M) = 4.64 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 5333

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 42.61N/124.40W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	33	50	107	215	58	66	3	1	.	.	23
0.50 - 0.99	330	1550	5863	2282	1177	409	174	27	.	.	1141
1.00 - 1.49	110	1550	4205	1000	2851	1303	277	133	.	.	1141
1.50 - 1.99	11	1813	915	339	1005	372	161	14	.	.	1141
2.00 - 2.49	.	424	337	100	268	207	116	14	.	.	1141
2.50 - 2.99	.	1	23	12	36	20	11	1	.	.	1141
3.00 - 3.49	.	.	63	1	181	117	26	1	.	.	1141
3.50 - 3.99	.	.	.	.	58	117	26	1	.	.	1141
4.00 - 4.49	.	.	.	.	181	117	26	1	.	.	1141
4.50 - 4.99	.	.	.	.	181	117	26	1	.	.	1141
5.00 +	.	.	.	.	181	117	26	1	.	.	1141
TOTAL	141	2864	13242	13478	17320	22840	15258	2246	68	0	51132

MEAN HS(M) = 2.80 LARGEST HS(M) = 7.78 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 51132

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 42.61N/124.40W LAT. LON. END = 42.46N/124.43W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	11	20	20	2	1	1	1	1	1	1	0
0.50 - 0.99	20	20	11	2	1	1	1	1	1	1	0
1.00 - 1.49	0	10	11	1	1	1	1	1	1	1	0
1.50 - 1.99	0	10	11	1	1	1	1	1	1	1	0
2.00 - 2.49	0	10	11	1	1	1	1	1	1	1	0
2.50 - 2.99	0	10	11	1	1	1	1	1	1	1	0
3.00 - 3.49	0	10	11	1	1	1	1	1	1	1	0
3.50 - 3.99	0	10	11	1	1	1	1	1	1	1	0
4.00 - 4.49	0	10	11	1	1	1	1	1	1	1	0
4.50 - 4.99	0	10	11	1	1	1	1	1	1	1	0
5.00 +	0	10	11	1	1	1	1	1	1	1	0
TOTAL	56	399	832	594	770	553	117	0	0	0	2331

MEAN HS(M) = 3.27 LARGEST HS(M) = 7.29 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1945

PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 42.61N/124.40W LAT. LON. END = 42.46N/124.43W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	1	8	1	1	1	1	1	1	1	1	0
0.50 - 0.99	1	10	1	1	1	1	1	1	1	1	0
1.00 - 1.49	1	10	1	1	1	1	1	1	1	1	0
1.50 - 1.99	1	10	1	1	1	1	1	1	1	1	0
2.00 - 2.49	1	10	1	1	1	1	1	1	1	1	0
2.50 - 2.99	1	10	1	1	1	1	1	1	1	1	0
3.00 - 3.49	1	10	1	1	1	1	1	1	1	1	0
3.50 - 3.99	1	10	1	1	1	1	1	1	1	1	0
4.00 - 4.49	1	10	1	1	1	1	1	1	1	1	0
4.50 - 4.99	1	10	1	1	1	1	1	1	1	1	0
5.00 +	1	10	1	1	1	1	1	1	1	1	0
TOTAL	4	24	2	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.46 LARGEST HS(M) = 2.09 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 21

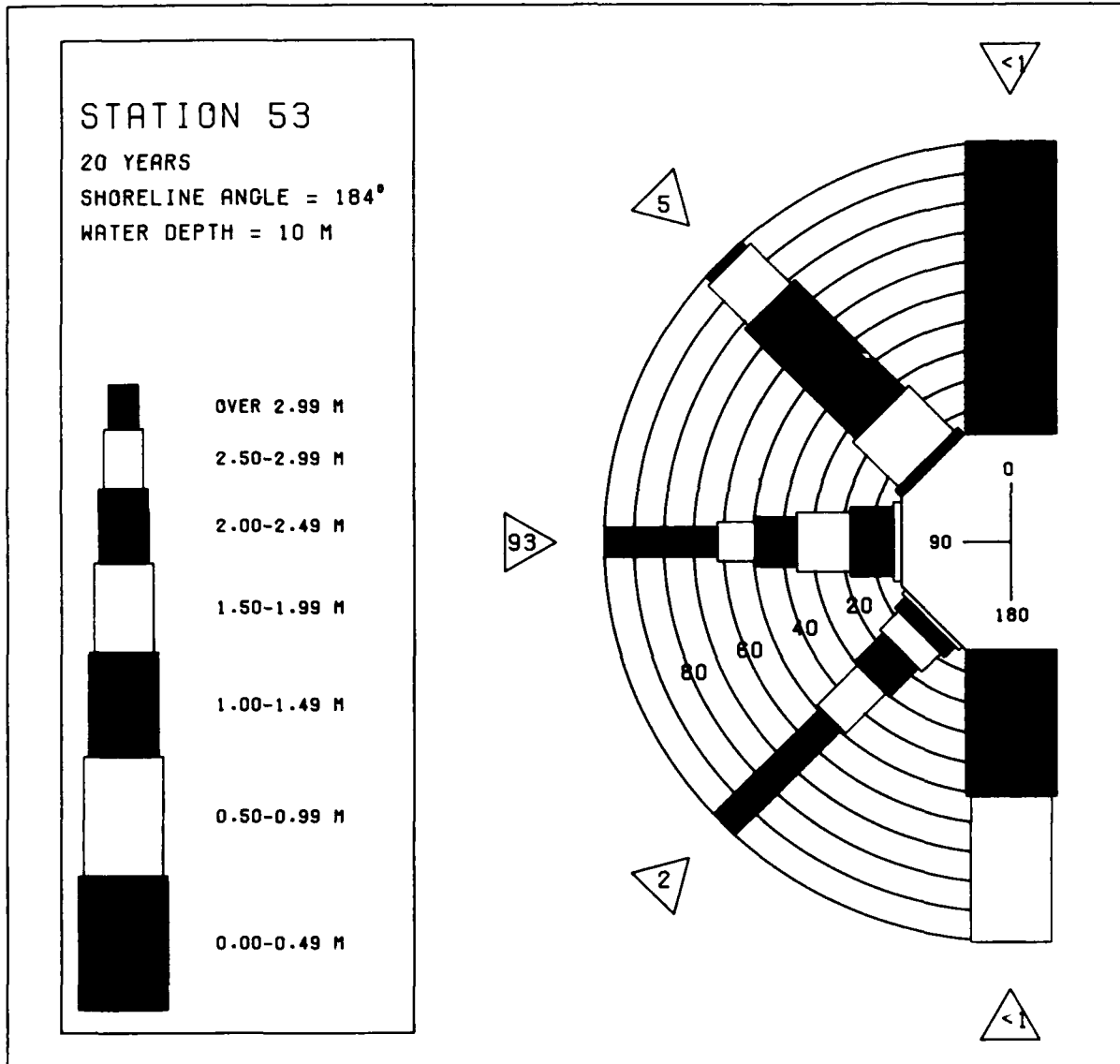
PHASE 3 ST. 53 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 42.61N/124.40W LAT. LON. END = 42.46N/124.43W
 SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0	0	0	0	0	0	0	0	0	0	0
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 53 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 42.61N/124.40W LAT. LONG. END= 42.46N/124.43W
SHORELINE ANGLE = 184.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
U.S. SAILORS	100	1	1	1	1	1	1	1	1	1	1	19
U.S. SAILORS	99	1	1	1	1	1	1	1	1	1	1	36
U.S. SAILORS	98	1	1	1	1	1	1	1	1	1	1	13
U.S. SAILORS	97	1	1	1	1	1	1	1	1	1	1	33
U.S. SAILORS	96	1	1	1	1	1	1	1	1	1	1	78
U.S. SAILORS	95	1	1	1	1	1	1	1	1	1	1	34
U.S. SAILORS	94	1	1	1	1	1	1	1	1	1	1	198
U.S. SAILORS	93	1	1	1	1	1	1	1	1	1	1	1046
U.S. SAILORS	92	1	1	1	1	1	1	1	1	1	1	862
U.S. SAILORS	91	1	1	1	1	1	1	1	1	1	1	639
U.S. SAILORS	90	1	1	1	1	1	1	1	1	1	1	454
U.S. SAILORS	89	1	1	1	1	1	1	1	1	1	1	615
U.S. SAILORS	88	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	87	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	86	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	85	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	84	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	83	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	82	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	81	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	80	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	79	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	78	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	77	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	76	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	75	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	74	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	73	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	72	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	71	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	70	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	69	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	68	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	67	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	66	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	65	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	64	1	1	1	1	1	1	1	1	1	1	
U.S. SAILORS	63	1										



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 53 (42.61N/ 124.40W TO 42.46N/ 124.43W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	3.8	3.8	3.3	2.7	2.0	1.7	1.5	1.4	1.7	2.7	3.6	4.1	
1976													
1977													
1978													
1979													
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2016													
2017													
2018													
2019													
2020													

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 53 (42.61N/ 124.40W TO 42.46N/ 124.43W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	3.8	3.8	3.3	2.7	2.0	1.7	1.5	1.4	1.7	2.7	3.6	4.1	
1976													
1977													
1978													
1979													
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2015													
2016													
2017													
2018													
2019													
2020													

20 YR. STATISTICS FOR PACIFIC STATION 53 (42.61N/ 124.40W TO 42.46N/ 124.43W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	90-100
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	4.6
LARGEST WAVE HS	(METERS)	16.8
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.8
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	89
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121203

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	2473	856	1	0	0	0	0	0	0	0	1950

MEAN HS(M) = 1.49 LARGEST HS(M) = 2.64 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 1950

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	1323	5034	4746	1026	352	83	6	0	0	0	7360

MEAN HS(M) = 1.59 LARGEST HS(M) = 4.49 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 7360

PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	94	1939	9350	12548	16952	22737	15288	2317	60	0	47524

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47524

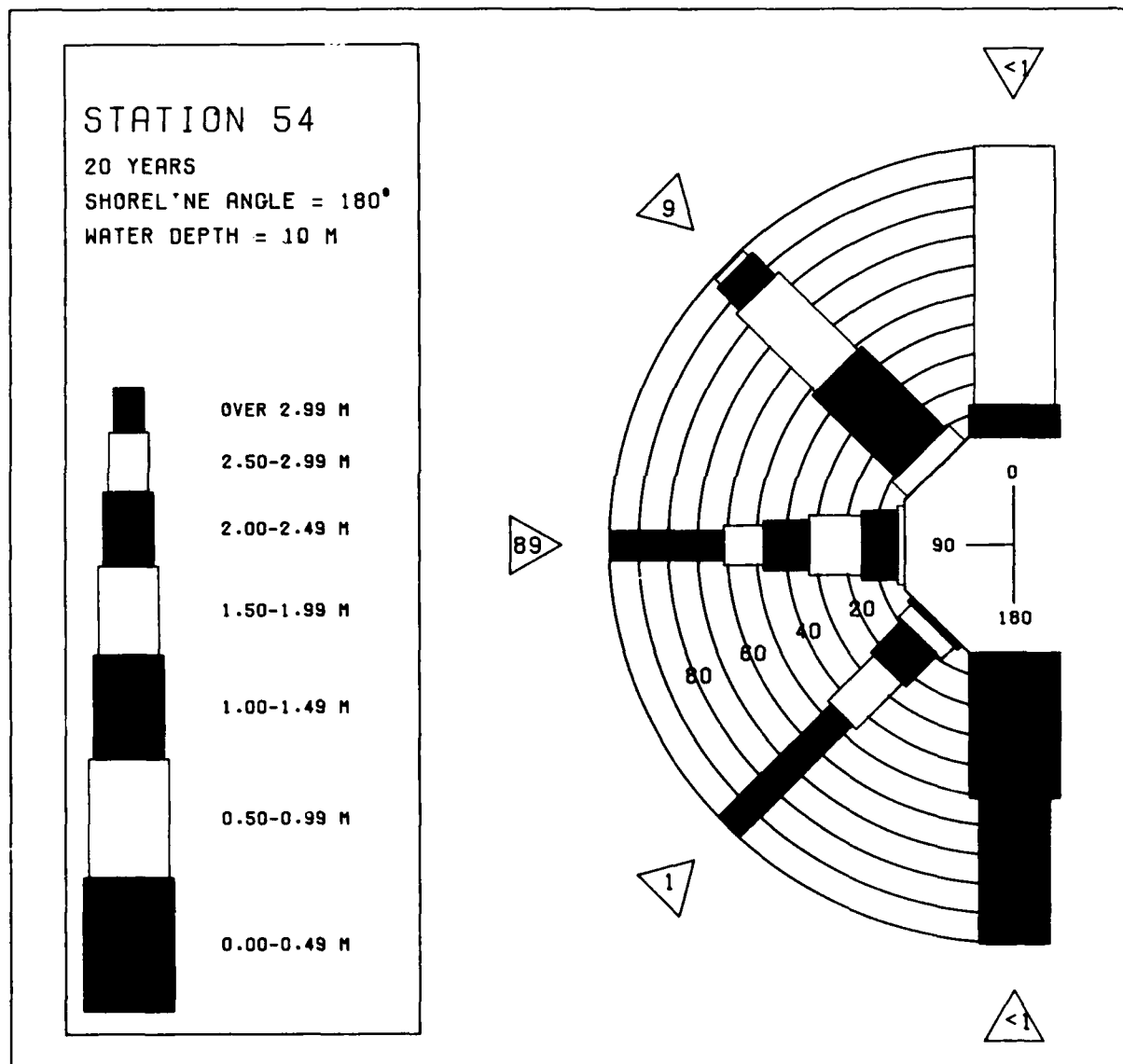
PHASE 3 ST. 54 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	
0.5-0.99	0	
1.0-1.49	0	
1.5-1.99	0	
2.0-2.49	0	
2.5-2.99	0	
3.0-3.49	0	
3.5-3.99	0	
4.0-4.49	0	
4.5-4.99	0	
5.0-5.49	0	
5.5-5.99	0	
6.0-6.49	0	
6.5-6.99	0	
7.0-7.49	0	
7.5-7.99	0	
8.0-8.49	0	
8.5-8.99	0	
9.0-9.49	0	
9.5-9.99	0	
10.0-10.49	0	
10.5-10.99	0	
11.0-11.49	0	
11.5-11.99	0	
12.0-12.49	0	
12.5-12.99	0	
13.0-13.49	0	
13.5-13.99	0	
14.0-14.49	0	
14.5-14.99	0	
15.0-15.49	0	
15.5-15.99	0	
16.0-16.49	0	
16.5-16.99	0	
17.0-17.49	0	
17.5-17.99	0	
18.0-18.49	0	
18.5-18.99	0	
19.0-19.49	0	
19.5-19.99	0	
20.0-20.49	0	
20.5-20.99	0	
21.0-21.49	0	
21.5-21.99	0	
22.0-22.49	0	
22.5-22.99	0	
23.0-23.49	0	
23.5-23.99	0	
24.0-24.49	0	
24.5-24.99	0	
25.0-25.49	0	
25.5-25.99	0	
26.0-26.49	0	
26.5-26.99	0	
27.0-27.49	0	
27.5-27.99	0	
28.0-28.49	0	
28.5-28.99	0	
29.0-29.49	0	
29.5-29.99	0	
30.0-30.49	0	
30.5-30.99	0	
31.0-31.49	0	
31.5-31.99	0	
32.0-32.49	0	
32.5-32.99	0	
33.0-33.49	0	
33.5-33.99	0	
34.0-34.49	0	
34.5-34.99	0	
35.0-35.49	0	
35.5-35.99	0	
36.0-36.49	0	
36.5-36.99	0	
37.0-37.49	0	
37.5-37.99	0	
38.0-38.49	0	
38.5-38.99	0	
39.0-39.49	0	
39.5-39.99	0	
40.0-40.49	0	
40.5-40.99	0	
41.0-41.49	0	
41.5-41.99	0	
42.0-42.49	0	
42.5-42.99	0	
43.0-43.49	0	
43.5-43.99	0	
44.0-44.49	0	
44.5-44.99	0	
45.0-45.49	0	
45.5-45.99	0	
46.0-46.49	0	
46.5-46.99	0	
47.0-47.49	0	
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93.0-93.49	0	
93.5-93.99	0	
94.0-94.49	0	
94.5-94.99	0	
95.0-95.49	0	
95.5-95.99	0	
96.0-96.49	0	

PHASE 3 ST. 54 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 42.46N/124.43W LAT. LON. END= 42.46N/124.43W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	1	3	118	20	7	6	1	1	1	1	280
0.50-0.99	34	93	538	256	116	49	18	2	1	1	1449
1.00-1.49	189	292	524	362	343	124	52	3	1	1	1954
1.50-1.99	149	265	524	362	343	124	52	3	1	1	1491
2.00-2.49	16	110	143	117	406	512	188	2	1	1	1258
2.50-2.99	1	4	66	61	227	421	264	18	1	1	1053
3.00-3.49	1	1	31	31	98	251	275	18	1	1	863
3.50-3.99	1	1	8	22	51	106	258	137	1	1	626
4.00-4.49	1	1	1	7	11	63	348	226	1	1	422
4.50-4.99	1	1	1	1	1	1	1	1	1	1	559
TOTAL	389	812	1477	1404	1792	2319	1534	228	4	0	58440

MEAN HS(M) = 2.69 LARGEST HS(M) = 7.79 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 54 (42.46N/ 124.43W TO 42.46N/ 124.43W)

YEAR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1975	3.8	3.7	3.3	2.7	2.1	1.8	1.6	1.5	1.7	2.7	3.5	4.0

MEAN
1.0-0.0-0.0-0.0-0.0-0.0-0.0-0.0-0.0-0.0-0.0-0.0-0.0

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 54 (42.46N/ 124.43W TO 42.46N/ 124.43W)

YEAR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1975	5.1	4.0	3.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

20 YR. STATISTICS FOR PACIFIC STATION 54 (42.46N/ 124.43W TO 42.46N/ 124.43W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) 2.7
MEAN PEAK WAVE PERIOD (SECONDS) 11.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND (DEGREES) 90-100
STANDARD DEVIATION OF WAVE HS (METERS) 1.0
STANDARD DEVIATION OF WAVE TP (SECONDS) 7.0
LARGEST WAVE HS (METERS) 10.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS) 10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS (DEGREES) 100
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) 74011512

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LONG. START = 42.35N/124.43W LAT. LONG. END = 42.25N/124.45W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LONG. START = 42.35N/124.43W LAT. LONG. END = 42.25N/124.45W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	.	.	.	.	.	.	.	.	.	289
1.00-1.49	1504	65	.	.	.	.	.	.	.	.	1689
1.50-1.99	894	455	.	.	.	.	.	.	.	.	1533
2.00-2.49	83	636	3	.	.	.	.	.	.	.	1833
2.50-2.99	.	102	.	.	.	.	.	.	.	.	300
3.00-3.49	.	5	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2705	1261	3	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.46 LARGEST HS(M) = 2.68 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 2322

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LONG. START = 42.35N/124.43W LAT. LONG. END = 42.25N/124.45W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	17	37	1	.	.	.	.	.	.	.	56
0.50-0.99	121	691	638	109	22	18	3	.	.	.	1602
1.00-1.49	415	1998	3122	879	207	17	1	.	.	.	6679
1.50-1.99	308	1471	2549	1964	499	18	.	.	.	.	6809
2.00-2.49	23	588	438	1066	894	3	.	.	.	.	3012
2.50-2.99	1	150	200	193	496	32	.	.	.	.	1072
3.00-3.49	.	22	77	65	270	29	.	.	.	.	463
3.50-3.99	.	.	34	10	51	37	.	.	.	.	132
4.00-4.49	.	.	3	.	10	17	.	.	.	.	30
4.50-4.99	.	.	.	.	.	3	.	.	.	.	3
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	885	4957	7101	4287	2449	175	4	0	0	0	0

MEAN HS(M) = 1.68 LARGEST HS(M) = 4.60 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 11617

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LONG. START = 42.35N/124.43W LAT. LONG. END = 42.25N/124.45W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	35	1	1	.	.	.	.	.	.	.	2
0.50-0.99	35	256	595	123	53	47	5	1	13	.	1128
1.00-1.49	13	583	2464	1827	1030	503	73	27	1	.	6521
1.50-1.99	35	395	2571	3420	3071	1285	191	34	1	.	11003
2.00-2.49	5	229	857	2390	4190	3006	550	35	1	.	11263
2.50-2.99	.	152	318	802	3362	4988	1273	92	22	.	11009
3.00-3.49	.	23	248	417	1815	5001	1906	136	5	.	9549
3.50-3.99	.	3	193	205	770	3952	2669	179	3	.	7976
4.00-4.49	.	.	70	148	390	2323	2749	203	13	.	5896
4.50-4.99	.	.	5	58	165	977	2511	256	.	.	3972
5.00+	.	.	.	.	75	581	3324	1351	.	.	5337
TOTAL	88	1642	7322	9394	14921	22663	15251	2314	59	0	0

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 43068

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 42.35N/124.43W LAT. LONG. END = 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

MEAN HS(M) = 3.48 LARGEST HS(M) = 7.49 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1416

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
LAT. (ON. START) = 42.35N/124.43W LAT. (ON. END) = 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

MEAN HS(M) = 1.87 LARGEST HS(M) = 2.34 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 17

PHASE 3 ST. 55 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LON. START = 42.35N/124.43W LAT. LON. END = 42.25N/124.45W
SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

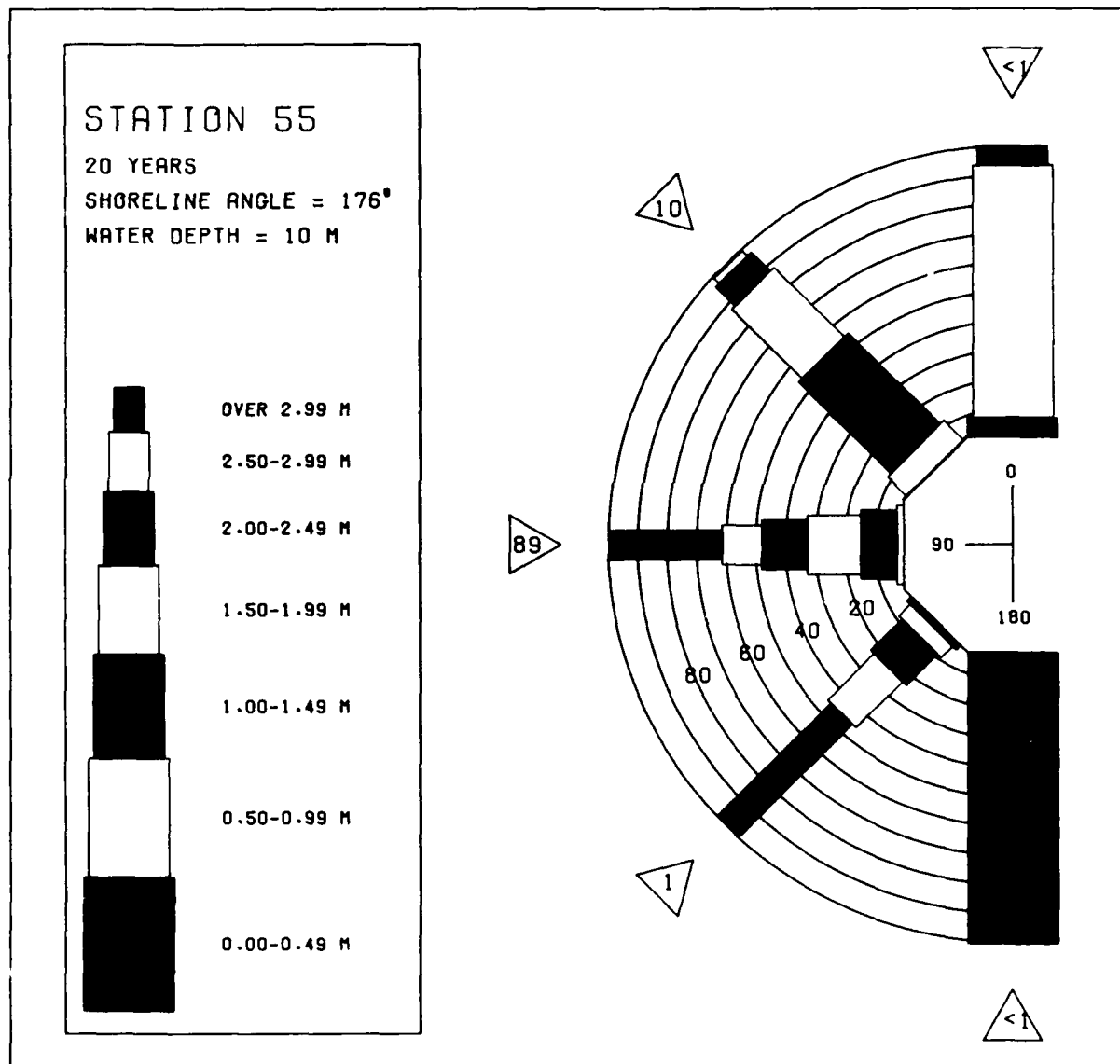
[illegible]

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 55 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 42.35N/124.43W LAT. LON. END= 42.25N/124.45W
 SHORELINE ANGLE = 176.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	1	3	23	23	7	6	7	2	1	1	4
0.5-0.99	38	101	124	270	123	52	7	2	1	1	300
1.0-1.49	193	307	356	538	511	301	19	3	1	1	1517
1.5-1.99	124	254	317	351	511	301	19	3	1	1	1472
2.0-2.49	12	41	138	106	217	503	127	3	2	1	1039
2.5-2.99	1	5	65	61	96	190	267	13	1	1	849
3.0-3.49	1	1	34	22	53	403	276	10	1	1	624
3.5-3.99	1	1	9	8	26	243	253	1	1	1	418
4.0-4.49	1	1	1	1	13	105	336	1	1	1	550
TOTAL	368	812	1500	1412	1795	2313	1530	227	4	0	58440

MEAN HS(M) = 2.67 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

[illegible]

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.3
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.0
LARGEST WAVE HS	(METERS)	12.0
WAVE ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	100.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	100.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		740115Z

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	0	0	0	0	0	0	0	0	0	0	
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	3	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.35 LARGEST HS(M) = 0.46 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 2

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	27	23	0	0	0	0	0	0	0	0	
0.50 - 0.99	537	268	0	0	0	0	0	0	0	0	
1.00 - 1.49	1716	1329	8	0	0	0	0	0	0	0	
1.50 - 1.99	371	161	3	0	0	0	0	0	0	0	
2.00 - 2.49	11	16	0	0	0	0	0	0	0	0	
2.50 - 2.99	0	10	0	0	0	0	0	0	0	0	
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	2662	2507	11	0	0	0	0	0	0	0	

MEAN HS(M) = 1.31 LARGEST HS(M) = 2.80 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 3031

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	22	42	10	1	6	8	29	3	1	0	
0.50 - 0.99	63	978	1456	340	87	85	29	0	0	0	
1.00 - 1.49	119	2014	6180	2722	1091	462	68	0	0	0	
1.50 - 1.99	121	831	3537	4464	2835	1105	99	0	0	0	
2.00 - 2.49	5	415	597	2104	3908	2034	200	0	0	0	
2.50 - 2.99	0	109	196	405	2024	3311	398	1	0	0	
3.00 - 3.49	0	0	102	148	725	2600	826	0	0	0	
3.50 - 3.99	0	1	47	51	193	1451	1100	0	0	0	
4.00 - 4.49	0	0	10	13	65	624	1112	0	0	0	
4.50 - 4.99	0	0	0	0	10	208	684	0	0	0	
5.00 +	0	0	0	0	1	78	479	0	0	0	
TOTAL	333	4391	12105	10248	10939	11964	4995	4	1	0	

MEAN HS(M) = 2.17 LARGEST HS(M) = 6.26 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 32149

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	27	100	189	47	20	3	0	1	11	0	
0.50 - 0.99	5	294	836	641	545	157	8	30	1	0	
1.00 - 1.49	29	164	886	1139	1216	530	172	25	3	0	
1.50 - 1.99	11	145	424	812	1415	1403	477	59	10	0	
2.00 - 2.49	0	148	314	391	1259	2239	1045	94	11	0	
2.50 - 2.99	0	41	289	311	888	2055	1363	172	3	0	
3.00 - 3.49	0	6	222	220	614	1883	1644	181	15	0	
3.50 - 3.99	0	0	73	200	376	1409	1745	244	0	0	
4.00 - 4.49	0	0	15	85	191	602	1461	272	0	0	
4.50 - 4.99	0	0	0	13	128	516	2239	1204	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	72	898	3249	3859	6652	10797	10154	2282	54	0	

MEAN HS(M) = 3.26 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 12.3 NUMBER OF CASES = 22242

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-1.00	.	.	.	.	.	.	.	.	.	.	1
1.00-1.50	.	1	1	.	.	.	.	.	.	.	14
1.50-2.00	6	23	17	.	.	.	.	.	.	.	46
2.00-2.50	5	95	53	10	13	6	.	.	.	.	132
2.50-3.00	.	114	95	54	30	1	.	.	.	.	254
3.00-3.50	.	39	167	104	66	6	.	.	.	.	382
3.50-4.00	.	5	106	100	70	13	.	.	.	.	394
4.00-4.50	.	.	34	44	83	27	.	.	.	.	188
4.50-5.00	.	.	1	39	92	53	3	.	.	.	188
5.00+	.	.	.	5	42	47	15	.	.	.	109
TOTAL	11	290	474	356	396	153	18	0	0	0	

MEAN HS(M) = 3.51 LARGEST HS(M) = 7.42 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 1005

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-1.00	.	.	.	.	.	.	.	.	.	.	0
1.00-1.50	1	.	.	.	.	.	.	.	.	.	7
1.50-2.00	6	1	.	.	.	.	.	.	.	.	8
2.00-2.50	.	.	.	.	.	.	.	.	.	.	0
2.50-3.00	.	.	.	.	.	.	.	.	.	.	0
3.00-3.50	.	.	.	.	.	.	.	.	.	.	0
3.50-4.00	.	.	.	.	.	.	.	.	.	.	0
4.00-4.50	.	.	.	.	.	.	.	.	.	.	0
4.50-5.00	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	9	0	0	0	0	0	0	0	0	

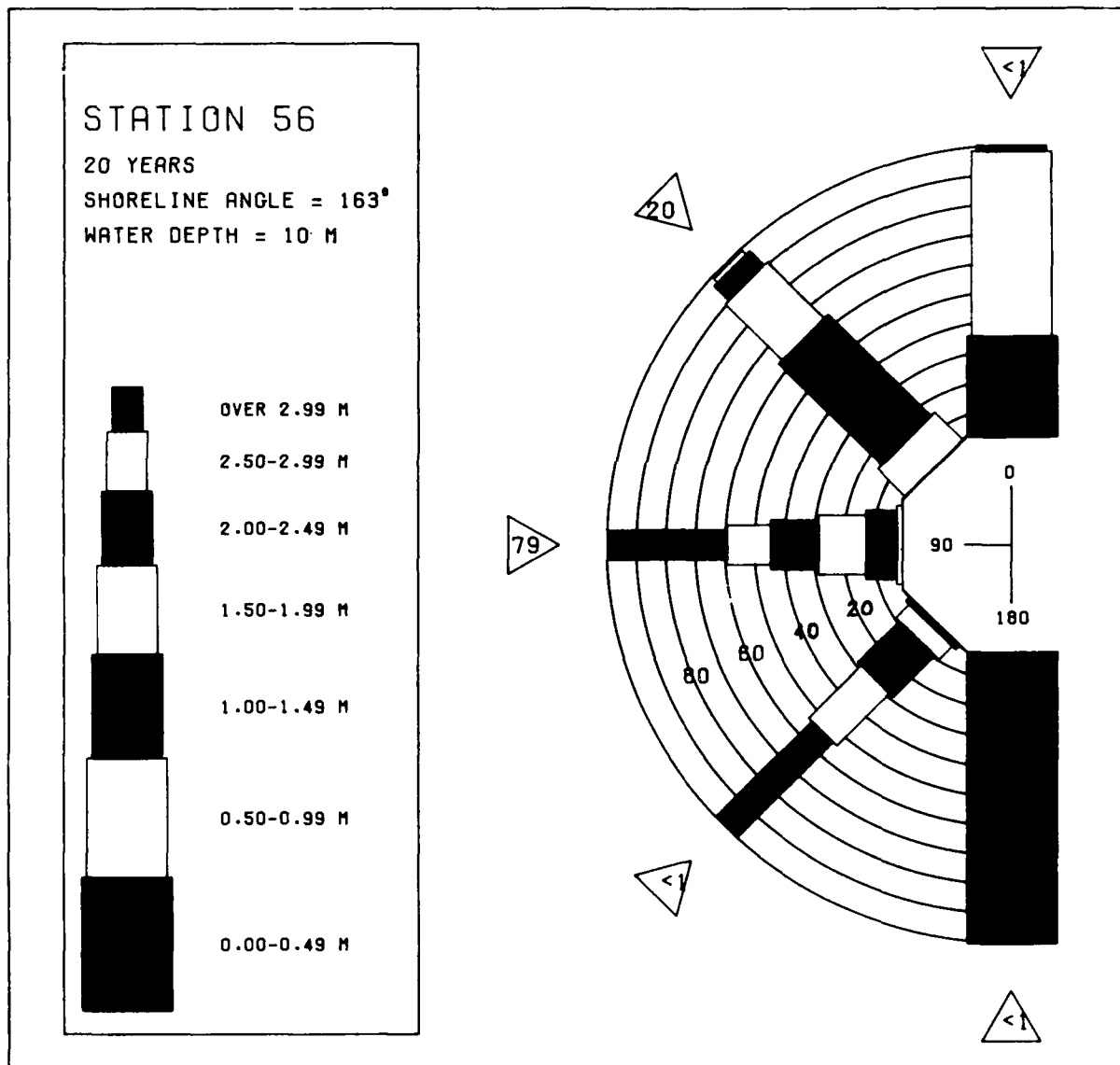
MEAN HS(M) = 1.91 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 11

PHASE 3 ST. 56 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 42.25N/124.45W LAT. LON. END= 42.10N/124.35W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.00	0
1.00-1.50	0
1.50-2.00	0
2.00-2.50	0
2.50-3.00	0
3.00-3.50	0
3.50-4.00	0
4.00-4.50	0
4.50-5.00	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 56 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 42.25N/124.45W LAT. LONG. END= 42.10N/124.35W
SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

WIS STATION 56 (42.25N/ 124.45W TO 42.10N/ 124.35W)

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 56 (42.25N/ 124.45W TO 42.10N/ 124.35W)

20 YR. STATISTICS FOR PACIFIC STATION 56 (42.25N/ 124.45W TO 42.10N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.00
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.00
STANDARD DEVIATION OF WAVE HS	(METERS)	1.20
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.50
LARGEST WAVE HS	(METERS)	2.80
ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.00
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	100.00
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		7401151

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0.0 - 14.9
 LAT. LON. START = 42.10N/124.35W LAT. LON. END = 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	124										124
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	124	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.13 LARGEST HS(M) = 0.33 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 73

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 42.10N/124.35W LAT. LON. END = 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	598	198	10								806
0.50 - 0.99	1374	2537	90								4001
1.00 - 1.49	323	1021	56								1400
1.50 - 1.99	10	277	11								298
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	2305	4041	167	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.85 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 3810

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 42.10N/124.35W LAT. LON. END = 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	15	15	100	17	80	11	8	27	10		225
0.50 - 0.99	15	15	100	17	80	11	8	27	10		225
1.00 - 1.49	15	15	100	17	80	11	8	27	10		225
1.50 - 1.99	15	15	100	17	80	11	8	27	10		225
2.00 - 2.49	15	15	100	17	80	11	8	27	10		225
2.50 - 2.99	15	15	100	17	80	11	8	27	10		225
3.00 - 3.49	15	15	100	17	80	11	8	27	10		225
3.50 - 3.99	15	15	100	17	80	11	8	27	10		225
4.00 - 4.49	15	15	100	17	80	11	8	27	10		225
4.50 - 4.99	15	15	100	17	80	11	8	27	10		225
5.00 +	15	15	100	17	80	11	8	27	10		225
TOTAL	185	3877	15787	13415	15898	19802	13076	2032	52	0	8558

MEAN HS(M) = 2.00 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 49186

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 42.10N/124.35W LAT. LON. END = 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	6	23	22	3	4	6					45
0.50 - 0.99	6	23	22	3	4	6					45
1.00 - 1.49	6	23	22	3	4	6					45
1.50 - 1.99	6	23	22	3	4	6					45
2.00 - 2.49	6	23	22	3	4	6					45
2.50 - 2.99	6	23	22	3	4	6					45
3.00 - 3.49	6	23	22	3	4	6					45
3.50 - 3.99	6	23	22	3	4	6					45
4.00 - 4.49	6	23	22	3	4	6					45
4.50 - 4.99	6	23	22	3	4	6					45
5.00 +	6	23	22	3	4	6					45
TOTAL	92	1091	1732	1340	1503	1602	1078	99	0	0	5056

MEAN HS(M) = 3.54 LARGEST HS(M) = 7.8 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 5056

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 42.10N/124.35W LAT. LONG. END= 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	3	0	0	0	0	0	0	0	0	0	3
0.5-0.99	5	3	5	0	0	0	0	0	0	0	13
1.0-1.49	51	30	11	5	0	0	0	0	0	0	97
1.5-1.99	1	87	41	5	3	5	0	0	0	0	142
2.0-2.49	0	104	44	11	1	0	0	0	0	0	160
2.5-2.99	0	35	11	3	0	0	0	0	0	0	59
3.0-3.49	0	3	0	0	0	0	0	0	0	0	3
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	60	262	121	24	4	5	0	0	0	0	285

MEAN HS(M) = 2.55 LARGEST HS(M) = 4.38 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 285

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 42.10N/124.35W LAT. LONG. END= 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	0	0	0	0	0	0	0	0	0	1
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 57 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 42.10N/124.35W LAT. LONG. END= 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 57 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 42.10N/124.35W LAT. LON. END= 42.00N/124.21W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER		
0.00-0.49	142	406	683	201	480	310	8	1	1	1	1	114
0.50-0.99	142	406	683	201	480	310	8	1	1	1	1	15600
1.00-1.49	142	406	683	201	480	310	8	1	1	1	1	22900
1.50-1.99	142	406	683	201	480	310	8	1	1	1	1	16400
2.00-2.49	142	406	683	201	480	310	8	1	1	1	1	13400
2.50-2.99	142	406	683	201	480	310	8	1	1	1	1	10100
3.00-3.49	142	406	683	201	480	310	8	1	1	1	1	7800
3.50-3.99	142	406	683	201	480	310	8	1	1	1	1	5300
4.00-4.49	142	406	683	201	480	310	8	1	1	1	1	3200
4.50-4.99	142	406	683	201	480	310	8	1	1	1	1	1800
5.00-5.49	142	406	683	201	480	310	8	1	1	1	1	172
TOTAL	275	926	1779	1473	1744	2136	1412	210	4	0		58440

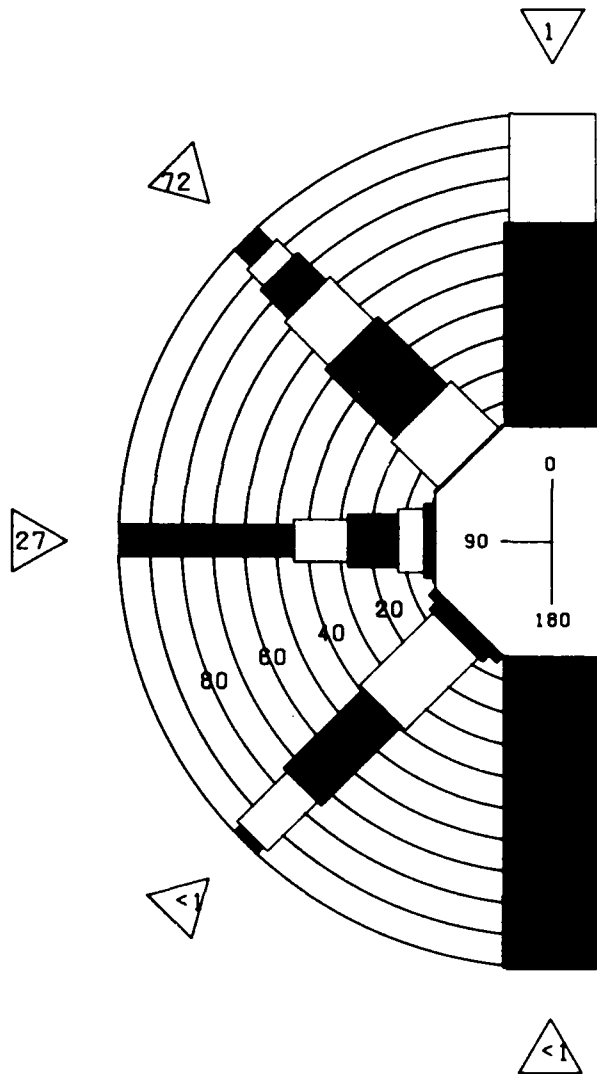
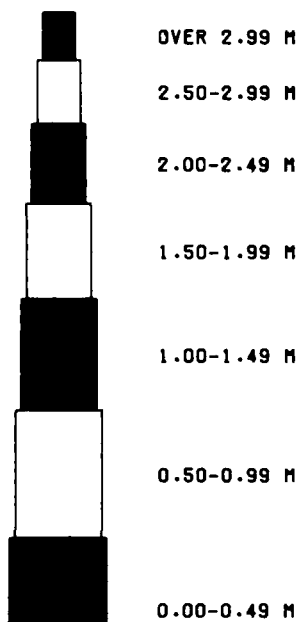
MEAN HS(M) = 2.06 LARGEST HS(M) = 7.81 MEAN TP(SEC)= 10.9 TOTAL CASES = 58440

STATION 57

20 YEARS

SHORELINE ANGLE = 134°

WATER DEPTH = 10 M



MONTH

[illegible]

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 57 (42.10N/ 124.35W TO 42.00N/ 124.21W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PERIOD	(SECONDS)	10.9
MOST FREQUENT WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT WAVE PERIOD	(SECONDS)	10.9
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	17.0
LARGEST WAVE TP	(SECONDS)	17.0
PERCENT OCCURRENCE WITH LARGEST WAVE HS	(PERCENT)	17.0
AVERAGE OCCURRENCE ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	17.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011512

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
 SHORELINE ANGLE= 179.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0											0
0.1											0
0.2											0
0.3											0
0.4											0
0.5											0
0.6											0
0.7											0
0.8											0
0.9											0
1.0											0
1.1											0
1.2											0
1.3											0
1.4											0
1.5											0
1.6											0
1.7											0
1.8											0
1.9											0
2.0											0
2.1											0
2.2											0
2.3											0
2.4											0
2.5											0
2.6											0
2.7											0
2.8											0
2.9											0
3.0											0
3.1											0
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10.7											0
10.8											0
10.9											0
11.0											0
11.1											0
11.2											0
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11.4											0
11.5											0
11.6											0
11.7											0
11.8											0
11.9											0
12.0											0
12.1											0
12.2											0
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13.0											0
13.1											0
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14.9											0
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16.1											0
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16.8											0
16.9											0
17.0											0
17.1											0
17.2											0
17.3											0
17.4											0
17.5											0
17.6											0
17.7											0
17.8											0
17.9											0
18.0											0
18.1											0
18.2											0
18.3											0
18.4											0
18.5											0
18.6											0
18.7											0
18.8											0
18.9											0
19.0											0
19.1											0
19.2											0
19.3											0
19.4											0
19.5											0
19.6											0
19.7											0
19.8											0
19.9											0
20.0											

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	1	15	.	.	.	.	.	.	.	0
0.50 - 0.99	1	37	30	.	.	.	.	.	.	.	17
1.00 - 1.49	13	58	58	8	1	.	.	.	.	.	67
1.50 - 1.99	5	85	92	39	37	10	.	.	.	.	138
2.00 - 2.49	.	95	153	58	25	8	.	.	.	.	288
2.50 - 2.99	.	10	160	140	54	29	.	.	.	.	393
3.00 - 3.49	.	.	82	124	164	71	10	.	.	.	451
3.50 - 3.99	.	.	20	70	135	78	10	.	.	.	313
4.00 - 4.49	.	.	1	17	35	41	17	.	.	.	151
4.50 - 4.99	.	.	1	5	54	92	34	.	.	.	186
TOTAL	19	286	611	461	595	329	71	0	0	0	

MEAN HS(M) = 3.38 LARGEST HS(M) = 7.52 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1398

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	15	10	.	.	.	.	.	.	.	.	20
0.50 - 0.99	6	20	.	.	.	.	.	.	.	.	26
1.00 - 1.49	1	10	.	.	.	.	.	.	.	.	11
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18	40	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.71 LARGEST HS(M) = 1.63 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 36

PHASE 3 ST. 58 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 42.00N/124.21W LAT. LON. END= 41.86N/124.21W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

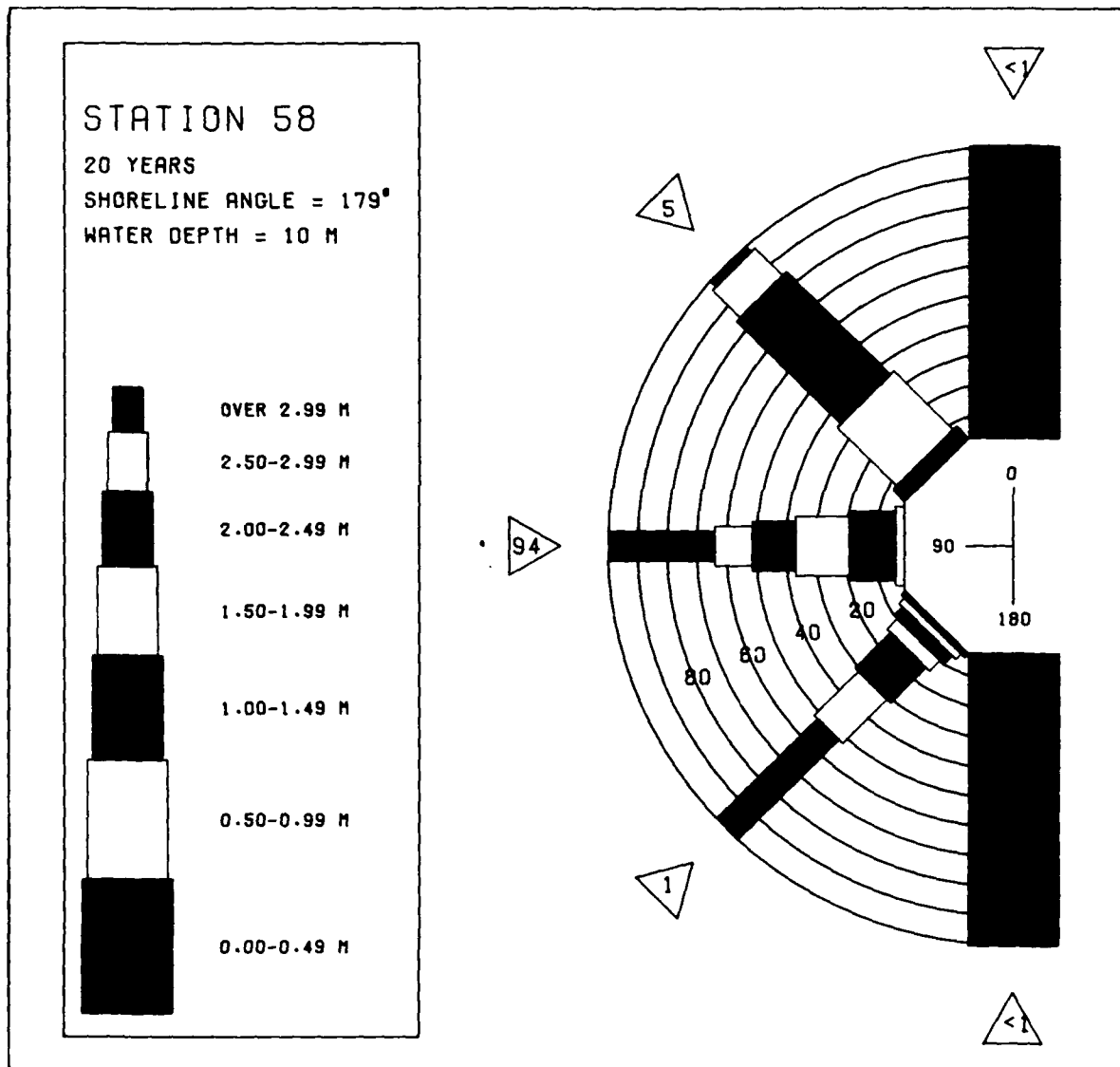
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 58 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 42.00N/124.21W LAT. LON. END = 41.86N/124.21W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.00	0.49	1.72	15.3	28	151	8	1	1	1	1	37
0.50	0.99	3.26	8.57	60.7	40.7	44	1	1	1	1	43
1.00	1.49	11.5	11.1	30.9	55.1	149	1	1	1	1	172
1.50	1.99	12.1	11.1	93	38.4	318	1	1	1	1	177
2.00	2.49	1.1	11.1	52.7	199	520	1	1	1	1	138
2.50	2.99	1.1	11.1	26.7	96	400	1	1	1	1	120
3.00	3.49	1.1	11.1	20	49	234	1	1	1	1	100
3.50	3.99	1.1	11.1	1	22	111	1	1	1	1	83
4.00	4.49	1.1	11.1	1	12	62	1	1	1	1	61
4.50	4.99	1.1	11.1	1	12	62	1	1	1	1	40
5.00	5.49	1.1	11.1	1	12	62	1	1	1	1	53
TOTAL	150	700	1682	1466	1879	2342	1506	232	3	0	5844

MEAN HS(M) = 2.61 LARGEST HS(M) = 7.77 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 58 (42.00N/ 124.21W TO 41.86N/ 124.21W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1957	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1958	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1959	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1960	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1961	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1962	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1963	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1964	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1965	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1966	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1967	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1968	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1969	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1970	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1971	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1972	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1973	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1974	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1975	3.4	3.5	3.4	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
MEAN	3.7	3.7	3.3	2.6	2.0	1.6	1.4	1.3	1.6	2.6	3.5	4.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 58 (42.00N/ 124.21W TO 41.86N/ 124.21W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1957	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1958	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1959	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1960	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1961	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1962	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1963	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1964	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1965	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1966	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1967	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1968	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1969	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1970	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1971	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1972	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1973	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1974	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
1975	5.3	5.9	5.8	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

20 YR. STATISTICS FOR PACIFIC STATION 58 (42.00N/ 124.21W TO 41.86N/ 124.21W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PERIOD	(SECONDS)	9.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90-100
STANDARD DEVIATION OF WAVE HGT	(METERS)	0.9
STANDARD DEVIATION OF WAVE PER	(SECONDS)	0.9
LARGEST WAVE HS	(METERS)	1.0
ASSOCIATED WITH LARGEST WAVE HS	(METERS)	1.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		1975 12 03

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 41.86N/124.21W LAT. LON. END = 41.78N/124.26W
 SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49										0	
0.50 - 0.99										0	
1.00 - 1.49										0	
1.50 - 1.99										0	
2.00 - 2.49										0	
2.50 - 2.99										0	
3.00 - 3.49										0	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 41.86N/124.21W LAT. LON. END = 41.78N/124.26W
 SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49										1	
0.50 - 0.99	41	20								61	
1.00 - 1.49	241	41								282	
1.50 - 1.99	6	29								35	
2.00 - 2.49		1								1	
2.50 - 2.99										0	
3.00 - 3.49										0	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	288	92	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.23 LARGEST HS(M) = 2.28 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 224

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 41.86N/124.21W LAT. LON. END = 41.78N/124.26W
 SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49										20	
0.50 - 0.99	149	176	27	8	3	3		1		363	
1.00 - 1.49	1360	1225	139	13						2763	
1.50 - 1.99	1784	3004	1405	139						4946	
2.00 - 2.49	63	1507	1430	1						1701	
2.50 - 2.99		229	1055	8						112	
3.00 - 3.49		22	233	6						29	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	3360	6174	712	47	4	3	0	1	0	0	

MEAN HS(M) = 1.72 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 6029

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 41.86N/124.21W LAT. LON. END = 41.78N/124.26W
 SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49										20	
0.50 - 0.99	29	43	83	3						1601	
1.00 - 1.49	559	1009	4555	155	49	39	18	1		9055	
1.50 - 1.99	559	578	4746	5041	3223	1367	54	20		15090	
2.00 - 2.49	23	231	1185	3620	5109	2885	179	35		11531	
2.50 - 2.99		136	266	1163	4440	4779	438	39		115048	
3.00 - 3.49		1	184	359	2255	5244	1161	85		100533	
3.50 - 3.99			131	133	788	4176	1877	116		7973	
4.00 - 4.49			32	82	260	2520	2494	244		6027	
4.50 - 4.99			6	41	106	1001	2908	215		3876	
5.00 +					27	439	3345	1430		5242	
TOTAL	163	2419	11877	12655	17292	22703	14984	2378	52	0	

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.73 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 49421

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
 SHORELINE ANGLE= 195.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	29	18	13	20	3	6	.	.	.	.	6
0.5	3	106	145	200	71	16	.	.	.	.	268
1.0	18	109	256	140	155	51	.	.	.	.	592
1.5	3	92	231	177	164	82	.	.	.	.	747
2.0	.	11	167	186	208	175	33	.	.	.	779
2.5	.	.	180	124	142	195	61	.	.	.	650
3.0	.	.	3	66	32	131	90	.	.	.	390
3.5	.	.	.	27	15	85	44	.	.	.	241
4.0	.	.	.	.	0	0	0	.	.	.	0
4.5	.	.	.	.	.	.	.	.	.	.	0
5.0	.	.	.	.	.	.	.	.	.	.	0
TOTAL	53	471	1186	833	1052	839	205	0	0	0	2728

MEAN HS(M) = 2.98 LARGEST HS(M) = 7.45 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 2728

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 41.85N/124.21W LAT. LON. END= 41.78N/124.26W
 SHORELINE ANGLE= 195.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	3	8	.	.	.	.	.	.	.	.	11
0.5	3	23	.	.	.	.	.	.	.	.	26
1.0	.	3	.	.	.	.	.	.	.	.	3
1.5	.	5	6	.	.	.	.	.	.	.	12
2.0	.	.	3	.	.	.	.	.	.	.	8
2.5	.	.	.	.	.	.	.	.	.	.	0
3.0	.	.	.	.	.	.	.	.	.	.	0
3.5	.	.	.	.	.	.	.	.	.	.	0
4.0	.	.	.	.	.	.	.	.	.	.	0
4.5	.	.	.	.	.	.	.	.	.	.	0
5.0	.	.	.	.	.	.	.	.	.	.	0
TOTAL	6	45	9	0	0	0	0	0	0	0	38

MEAN HS(M) = 1.13 LARGEST HS(M) = 2.42 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 38

PHASE 3 ST. 59 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
 SHORELINE ANGLE= 195.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0
0.5	0
1.0	0
1.5	0
2.0	0
2.5	0
3.0	0
3.5	0
4.0	0
4.5	0
5.0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 59 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 41.86N/124.21W LAT. LON. END= 41.78N/124.26W
 SHORELINE ANGLE = 195.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.00-0.49	1	3	9	16	5	4	1	1	1	1	1	4
0.50-0.99	24	67	91	109	103	37	15	2	1	1	1	208
1.00-1.49	166	338	476	520	526	293	127	43	11	1	1	1608
1.50-1.99	186	379	516	573	560	293	127	43	11	1	1	1608
2.00-2.49	9	18	25	31	30	16	7	2	1	1	1	100
2.50-2.99	1	4	6	7	7	4	2	1	1	1	1	50
3.00-3.49	1	1	2	3	3	2	1	1	1	1	1	20
3.50-3.99	1	1	1	1	1	1	1	1	1	1	1	10
4.00-4.49	1	1	1	1	1	1	1	1	1	1	1	10
4.50-4.99	1	1	1	1	1	1	1	1	1	1	1	10
5.00-5.49	1	1	1	1	1	1	1	1	1	1	1	10
5.50-5.99	1	1	1	1	1	1	1	1	1	1	1	10
6.00-6.49	1	1	1	1	1	1	1	1	1	1	1	10
6.50-6.99	1	1	1	1	1	1	1	1	1	1	1	10
7.00-7.49	1	1	1	1	1	1	1	1	1	1	1	10
7.50-7.99	1	1	1	1	1	1	1	1	1	1	1	10
8.00-8.49	1	1	1	1	1	1	1	1	1	1	1	10
8.50-8.99	1	1	1	1	1	1	1	1	1	1	1	10
9.00-9.49	1	1	1	1	1	1	1	1	1	1	1	10
9.50-9.99	1	1	1	1	1	1	1	1	1	1	1	10
10.00-10.49	1	1	1	1	1	1	1	1	1	1	1	10
10.50-10.99	1	1	1	1	1	1	1	1	1	1	1	10
11.00-11.49	1	1	1	1	1	1	1	1	1	1	1	10
11.50-11.99	1	1	1	1	1	1	1	1	1	1	1	10
12.00-12.49	1	1	1	1	1	1	1	1	1	1	1	10
12.50-12.99	1	1	1	1	1	1	1	1	1	1	1	10
13.00-13.49	1	1	1	1	1	1	1	1	1	1	1	10
13.50-13.99	1	1	1	1	1	1	1	1	1	1	1	10
14.00-14.49	1	1	1	1	1	1	1	1	1	1	1	10
14.50-14.99	1	1	1	1	1	1	1	1	1	1	1	10
15.00-15.49	1	1	1	1	1	1	1	1	1	1	1	10
15.50-15.99	1	1	1	1	1	1	1	1	1	1	1	10
16.00-16.49	1	1	1	1	1	1	1	1	1	1	1	10
16.50-16.99	1	1	1	1	1	1	1	1	1	1	1	10
17.00-17.49	1	1	1	1	1	1	1	1	1	1	1	10
17.50-17.99	1	1	1	1	1	1	1	1	1	1	1	10
18.00-18.49	1	1	1	1	1	1	1	1	1	1	1	10
18.50-18.99	1	1	1	1	1	1	1	1	1	1	1	10
19.00-19.49	1	1	1	1	1	1	1	1	1	1	1	10
19.50-19.99	1	1	1	1	1	1	1	1	1	1	1	10
20.00-20.49	1	1	1	1	1	1	1	1	1	1	1	10
20.50-20.99	1	1	1	1	1	1	1	1	1	1	1	10
21.00-21.49	1	1	1	1	1	1	1	1	1	1	1	10
21.50-21.99	1	1	1	1	1	1	1	1	1	1	1	10
22.00-22.49	1	1	1	1	1	1	1	1	1	1	1	10
22.50-22.99	1	1	1	1	1	1	1	1	1	1	1	10
23.00-23.49	1	1	1	1	1	1	1	1	1	1	1	10
23.50-23.99	1	1	1	1	1	1	1	1	1	1	1	10
24.00-24.49	1	1	1	1	1	1	1	1	1	1	1	10
24.50-24.99	1	1	1	1	1	1	1	1	1	1	1	10
25.00-25.49	1	1	1	1	1	1	1	1	1	1	1	10
25.50-25.99	1	1	1	1	1	1	1	1	1	1	1	10
26.00-26.49	1	1	1	1	1	1	1	1	1	1	1	10
26.50-26.99	1	1	1	1	1	1	1	1	1	1	1	10
27.00-27.49	1	1	1	1	1	1	1	1	1	1	1	10
27.50-27.99	1	1	1	1	1	1	1	1	1	1	1	10
28.00-28.49	1	1	1	1	1	1	1	1	1	1	1	10
28.50-28.99	1	1	1	1	1	1	1	1	1	1	1	10
29.00-29.49	1	1	1	1	1	1	1	1	1	1	1	10
29.50-29.99	1	1	1	1	1	1	1	1	1	1	1	10
30.00-30.49	1	1	1	1	1	1	1	1	1	1	1	10
30.50-30.99	1	1	1	1	1	1	1	1	1	1	1	10
31.00-31.49	1	1	1	1	1	1	1	1	1	1	1	10
31.50-31.99	1	1	1	1	1	1	1	1	1	1	1	10
32.00-32.49	1	1	1	1	1	1	1	1	1	1	1	10
32.50-32.99	1	1	1	1	1	1	1	1	1	1	1	10
33.00-33.49	1	1	1	1	1	1	1	1	1	1	1	10
33.50-33.99	1	1	1	1	1	1	1	1	1	1	1	10
34.00-34.49	1	1	1	1	1	1	1	1	1	1	1	10
34.50-34.99	1	1	1	1	1	1	1	1	1	1	1	10
35.00-35.49	1	1	1	1	1	1	1	1	1	1	1	10
35.50-35.99	1	1	1	1	1	1	1	1	1	1	1	10
36.00-36.49	1	1	1	1	1	1	1	1	1	1	1	10
36.50-36.99	1	1	1	1	1	1	1	1	1	1	1	10
37.00-37.49	1	1	1	1	1	1	1	1	1	1	1	10
37.50-37.99	1	1	1	1	1	1	1	1	1	1	1	10
38.00-38.49	1	1	1	1	1	1	1	1	1	1	1	10
38.50-38.99	1	1	1	1	1	1	1	1	1	1	1	10
39.00-39.49	1	1	1	1	1	1	1	1	1	1	1	10
39.50-39.99	1	1	1	1	1	1	1	1	1	1	1	10
40.00-40.49	1	1	1	1	1	1	1	1	1	1	1	10
40.50-40.99	1	1	1	1	1	1	1	1	1	1	1	10
41.00-41.49	1	1	1	1	1	1	1	1	1	1	1	10
41.50-41.99	1	1	1	1	1	1	1	1	1	1	1	10
42.00-42.49	1	1	1	1	1	1	1	1	1	1	1	10
42.50-42.99	1	1	1	1	1	1	1	1	1	1	1	10
43.00-43.49	1	1	1	1	1	1	1	1	1	1	1	10
43.50-43.99	1	1	1	1	1	1	1	1	1	1	1	10
44.00-44.49	1	1	1	1	1	1	1	1	1	1	1	10
44.50-44.99	1	1	1	1	1	1	1	1	1	1	1	10
45.00-45.49	1	1	1	1	1	1	1	1	1	1	1	10
45.50-45.99	1	1	1	1	1	1	1	1	1	1	1	10
46.00-46.49	1	1	1	1	1	1	1	1	1	1	1	10
46.50-46.99	1	1	1	1	1	1	1	1	1	1	1	10
47.00-47.49	1	1	1	1	1	1	1	1	1	1	1	10
47.50-47.99	1	1	1	1	1	1	1	1	1	1	1	10
48.00-48.49	1	1	1	1	1	1	1	1	1	1	1	10
48.50-48.99	1	1	1	1	1	1	1	1	1	1	1	10
49.00-49.49	1	1	1	1	1	1	1	1	1	1	1	10
49.50-49.99	1	1	1	1	1	1	1	1	1	1	1	10
50.00-50.49	1	1	1	1	1	1	1	1	1	1	1	10
50.50-50.99	1	1	1	1	1	1	1	1	1	1	1	10
51.00-51.49	1	1	1	1	1	1	1	1	1	1	1	10
51.50-51.99	1	1	1	1	1	1	1	1	1	1	1	10
52.00-52.49	1	1	1	1	1	1	1	1	1	1	1	10
52.50-52.99	1	1	1	1	1	1	1	1	1	1	1	10
53.00-53.49	1	1	1	1	1	1	1	1	1	1	1	10
53.50-53.99	1	1	1	1	1	1	1	1	1	1	1	10
54.00-54.49	1	1	1	1	1	1	1	1	1	1	1	10
54.50-54.99	1	1	1	1	1	1	1	1	1	1	1	10
55.00-55.49	1	1	1	1	1	1	1	1	1	1	1	10
55.50-55.99	1	1	1	1	1	1	1	1	1	1	1	10
56.00-56.49	1	1	1	1	1	1	1	1	1	1	1	10
56.50-56.99	1	1	1	1	1	1	1	1	1	1	1	10
57.00-57.49	1	1	1	1	1	1	1	1	1	1	1	10
57.50-57.99	1	1	1	1	1	1	1	1	1	1	1	10
58.00-58.49	1	1	1	1	1	1	1	1	1	1	1	10
58.50-58.99	1	1	1	1	1	1	1	1	1	1	1	10
59.00-59.49	1	1	1	1	1	1	1	1	1	1	1	10
59.50-59.99	1	1	1	1	1	1	1	1	1	1	1	10
60.00-60.49	1	1	1	1	1	1	1	1	1	1	1	10
60.50-60.99	1	1	1	1	1	1	1	1	1	1	1	10
61.00-61.49	1	1	1	1	1	1	1	1	1	1	1	10
61.50-61.99	1	1	1	1	1	1	1	1	1	1	1	10
62.00-62.49	1	1	1	1	1	1	1	1	1	1	1	10
62.50-62.99	1	1	1	1	1	1	1	1	1	1	1	10
63.00-63.49	1	1	1	1	1							

MONTH

[illegible]

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 59 (41.86N/ 124.21W TO 41.78N/ 124.26W)

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 12.7
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 90.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.6
LARGEST WAVE HS . . . . . (METERS) 7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 91.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . . . 69121209

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[illegible]

HEIGHT(METERS)	PERIOD(SECONDS)									TOTAL	
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00 - 0.49	1309	627	18	.	.	.	.	.	.	.	1954
0.50 - 0.99	1394	3016	325	.	.	.	.	.	.	.	4735
1.00 - 1.49	292	917	102	.	.	.	.	.	.	.	1311
1.50 - 1.99	22	172	22	.	.	.	.	.	.	.	216
2.00 - 2.49	.	6	1	.	.	.	.	.	.	.	7
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3017	4738	468	0	0	0	0	0	0	0	0

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD (SECONDS)								TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER			
0.00											495		
0.50											18089		
1.00											220662		
1.50											14743		
2.00											117352		
2.50											47353		
3.00											12008		
3.50											637		
4.00											484		
4.50													
5.00													
5.50													
6.00													
TOTAL	225	3252	15789	13608	16378	19663	12871	2171	32	0			

[illegible]

C59

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	1	5	.	.	.	.	.	.	.	6
0.50 - 1.00	3	1	.	.	.	.	.	.	.	.	4
1.00 - 1.49	22	1	.	.	.	.	.	.	.	.	26
1.50 - 2.00	88	17	1	.	.	.	.	.	.	.	106
2.00 - 2.49	111	94	3	.	.	.	.	.	.	.	208
2.50 - 3.00	10	102	.	.	.	.	.	.	.	.	112
3.00 - 3.49	.	44	.	.	.	.	.	.	.	.	44
3.50 - 4.00	.	.	1	.	.	.	.	.	.	.	1
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 5.00	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	240	259	10	0	0	0	0	0	0	0	302

MEAN HS(M) = 2.25 LARGEST HS(M) = 4.05 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 302

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	20	.	.	.	.	.	.	.	.	.	20
0.50 - 1.00	0
1.00 - 1.49	0
1.50 - 2.00	0
2.00 - 2.49	0
2.50 - 3.00	0
3.00 - 3.49	0
3.50 - 4.00	0
4.00 - 4.49	0
4.50 - 5.00	0
5.00 +	0
TOTAL	20	0	0	0	0	0	0	0	0	0	20

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.32 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 12

PHASE 3 ST. 60 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 41.78N/124.26W LAT. LON. END= 41.71N/124.15W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

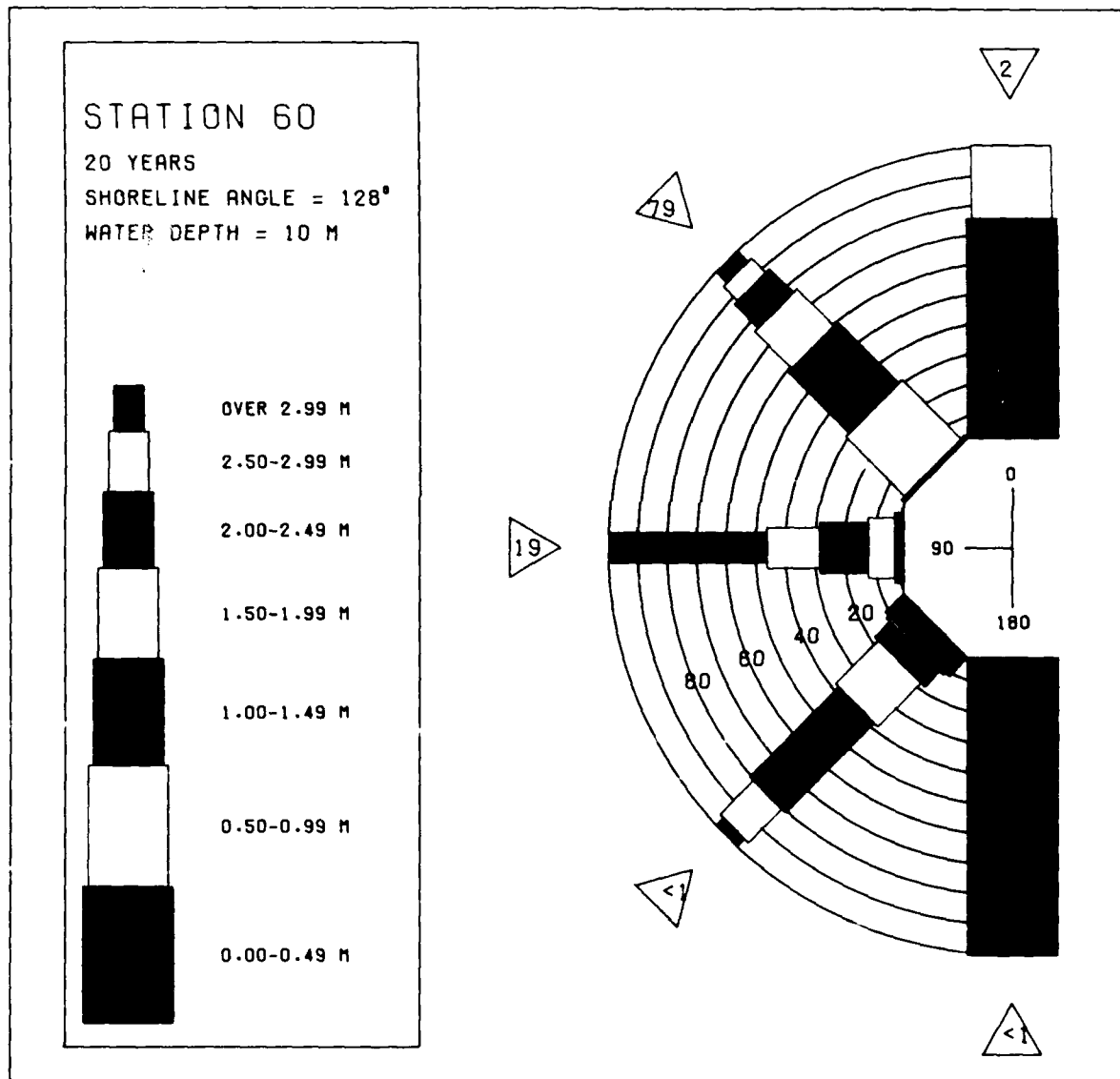
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 1.00	0
1.00 - 1.49	0
1.50 - 2.00	0
2.00 - 2.49	0
2.50 - 3.00	0
3.00 - 3.49	0
3.50 - 4.00	0
4.00 - 4.49	0
4.50 - 5.00	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 60 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 41.78N/124.26W LAT. LONG. END = 41.71N/124.15W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.50-0.99	156	147	174	108	104	92	67	46	31	18	121
1.00-1.49	147	174	108	104	92	67	46	31	18	121	121
1.50-1.99	220	108	104	92	67	46	31	18	121	121	121
2.00-2.49	220	108	104	92	67	46	31	18	121	121	121
2.50-2.99	220	108	104	92	67	46	31	18	121	121	121
3.00-3.49	220	108	104	92	67	46	31	18	121	121	121
3.50-3.99	220	108	104	92	67	46	31	18	121	121	121
4.00-4.49	220	108	104	92	67	46	31	18	121	121	121
4.50-4.99	220	108	104	92	67	46	31	18	121	121	121
5.00+	220	108	104	92	67	46	31	18	121	121	121
TOTAL	392	970	1777	1463	1754	2047	1336	215	3	0	58440

MEAN HS(M) = 1.80 LARGEST HS(M) = 7.86 MEAN TP(SEC) = 10.8 TOTAL CASES = 58440



MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
Y	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0	0
R	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	2.9	2.7	2.3	1.7	1.2	1.1	0.9	0.8	1.1	1.7	2.4	3.0	

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 60 (41.78N/ 124.26W TO 41.71N/ 124.15W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.8
MEAN PEAK WAVE PERIOD	(SECONDS)	6.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	5.9
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	86.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		7401512

[illegible]

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER				
0.0	0	0	0	0	0	0	592			
0.5	581	11	.	.	.	.	735
1.0	667	68	.	.	.	.	3
1.5	3	.	.	.	.	.	0
2.0	.	.	.	.	.	.	0
2.5	.	.	.	.	.	.	0
3.0	.	.	.	.	.	.	0
3.5	.	.	.	.	.	.	0
4.0	.	.	.	.	.	.	0
4.5	.	.	.	.	.	.	0
5.0	.	.	.	.	.	.	0
5.5	.	.	.	.	.	.	0
6.0	.	.	.	.	.	.	0
TOTAL	1251	79	0	0	0	0	779			

MEAN HS(M) = 0.50 LARGEST HS(M) = 1.06 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 779

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0			3		18	6		15			3
0.1	0			130	54	158	181	1	27			353
0.2	0		82	660	633	896	660	195	27			2415
0.3	0		273	602	633	896	660	195	27			3689
0.4	0		152	311	610	1223	1421	554	703			4228
0.5	0		171	256	308	1223	1421	554	703			5159
0.6	0		135	330	308	655	1587	1305	234			4642
0.7	0		46	171	330	655	1587	1305	234			4642
0.8	0		5	92	189	1654	1088	509	399			3343
0.9	0		1	10	94	1654	1088	509	399			3343
1.0	0				33	273	438	1786	1167			3528
TOTAL		67	865	2566	3347	6074	7990	3273	2410	41	0	
MEAN HS(M) = 3.23		LARGEST HS(M) = 7.81		MEAN TP(SEC) = 12.4		NUMBER OF CASES = 20145						

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 41.71N/124.15W LAT. LON. END = 41.58N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	.	.	.	.	.	.	.	.	.	0
1.0-1.49	.	1	3	1	1	.	.	.	.	.	7
1.5-1.99	10	2	3	1	1	.	.	.	.	.	17
2.0-2.49	1	10	10	13	18	.	.	.	.	.	53
2.5-2.99	.	5	10	15	24	.	.	.	.	.	79
3.0-3.49	.	1	2	3	7	3	.	.	.	.	24
3.5-3.99	.	.	3	3	7	4	.	.	.	.	24
4.0-4.49	.	.	.	3	3	3	.	.	.	.	18
4.5-4.99	.	.	.	.	3	3	.	.	.	.	10
5.0-5.49	.	.	.	.	.	.	.	.	.	.	7
5.5-5.99	.	.	.	.	.	.	.	.	.	.	0
6.0-6.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	19	302	429	282	313	113	5	0	0	0	867

MEAN HS(M) = 3.36 LARGEST HS(M) = 6.26 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 867

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 41.71N/124.15W LAT. LON. END = 41.58N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	.	.	.	.	.	.	.	.	.	0
1.0-1.49	1	.	.	.	.	.	.	.	.	.	1
1.5-1.99	5	.	.	.	.	.	.	.	.	.	5
2.0-2.49	1	3	.	.	.	.	.	.	.	.	4
2.5-2.99	.	1	.	.	.	.	.	.	.	.	1
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	0
6.0-6.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8	4	0	0	0	0	0	0	0	0	9

MEAN HS(M) = 1.83 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 9

PHASE 3 ST. 61 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 41.71N/124.15W LAT. LON. END = 41.58N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.3	22.3- LONGER	TOTAL
0.0-0.49	11	.	.	.	.	.	.	.	.	.	11
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
TOTAL	11	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.15 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 7

PHASE 3 ST. 61 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 41.71N/124.15W LAT. LON. END = 41.58N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	106	221	261	334	106	107	107	107	107	107	107	73
0.50-0.99	106	221	261	334	106	107	107	107	107	107	107	673
1.00-1.49	106	221	261	334	106	107	107	107	107	107	107	1677
1.50-1.99	106	221	261	334	106	107	107	107	107	107	107	1378
2.00-2.49	106	221	261	334	106	107	107	107	107	107	107	1045
2.50-2.99	106	221	261	334	106	107	107	107	107	107	107	779
3.00-3.49	106	221	261	334	106	107	107	107	107	107	107	562
3.50-3.99	106	221	261	334	106	107	107	107	107	107	107	339
4.00-4.49	106	221	261	334	106	107	107	107	107	107	107	417
TOTAL	212	646	1723	1488	1862	2295	1488	236	2	0		58440

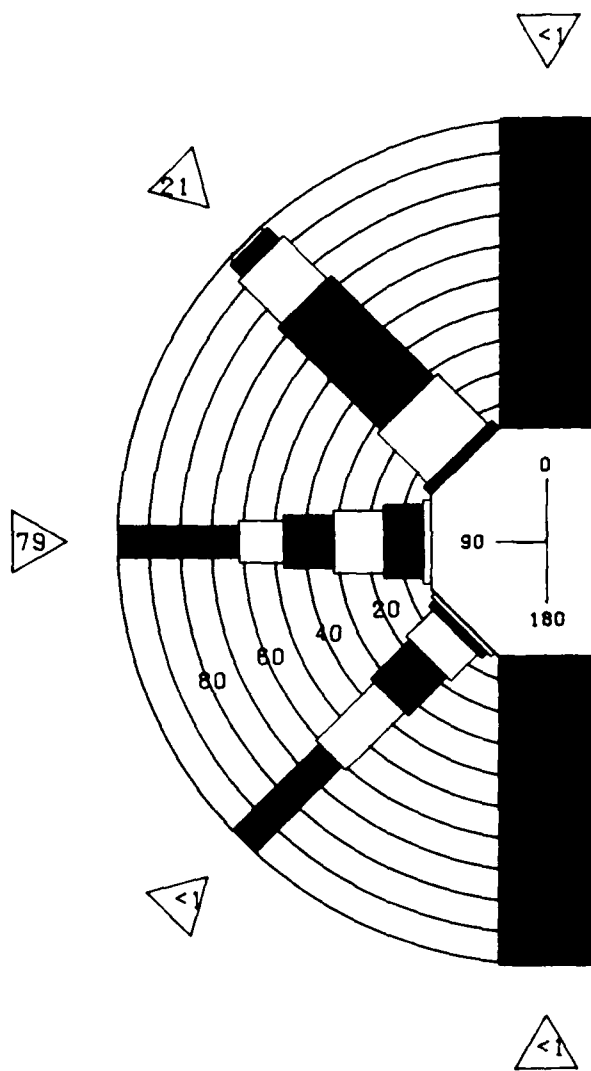
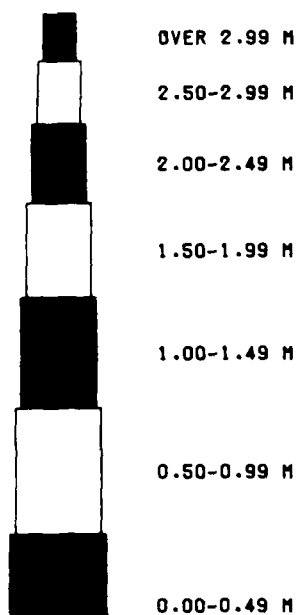
MEAN HS(M) = 2.46 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440

STATION 61

20 YEARS

SHORELINE ANGLE = 163°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 61 (41.71N/ 124.15W TO 41.58N/ 124.11W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	3.6	3.5	3.1	2.5	1.8	1.5	1.3	1.2	1.5	2.4	3.3	3.8
1957												
1958												
1959												
1960												
1961												
1962												
1963												
1964												
1965												
1966												
1967												
1968												
1969												
1970												
1971												
1972												
1973												
1974												
1975												
MEAN	3.6	3.5	3.1	2.5	1.8	1.5	1.3	1.2	1.5	2.4	3.3	3.8

MEAN
1956-1975

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 61 (41.71N/ 124.15W TO 41.58N/ 124.11W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR												
1956	6.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1957	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1958	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1959	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1960	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1961	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1962	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1963	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1964	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1965	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1966	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1967	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1968	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1969	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1970	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1971	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1972	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1973	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1974	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
1975	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5

20 YR. STATISTICS FOR PACIFIC STATION 61 (41.71N/ 124.15W TO 41.58N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	5.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.5
MOST FREQUENT WAVE DIRECTION	(DEGREE)	100
STANDARD DEVIATION OF WAVE HGT	(METERS)	1.0
STANDARD DEVIATION OF WAVE PER	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	11.5
DATE OF LARGEST HS OCCURRENCE	(YR,MO,DA,HR)	69121121

[illegible][illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0				1		3					60
0.1	0				186		5					195
0.2	0				1712		32					1953
0.3	0				540		5					545
0.4	0				1704		1					1705
0.5	0				2811		181					2992
0.6	0				1733		251					2784
0.7	0				556		366					922
0.8	0				100		313					413
0.9	0				34		107					141
1.0	0				3		27					30
TOTAL		542	4455	9690	7710	7512	1911	51	1	0	0	18643

MEAN HS(M) = 1.83 LARGEST HS(M) = 5.74 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 18643

[illegible]

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 - 5.49	0
5.50 - 5.99	0
TOTAL	13	283	493	427	446	206	20	0	0	0	1115

MEAN HS(M) = 3.40 LARGEST HS(M) = 7.01 MEAN TP(SEC) = 9.8 NUMBER OF CASES = 1115

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 - 5.49	0
5.50 - 5.99	0
TOTAL	6	1	0	0	0	0	0	0	0	0	5

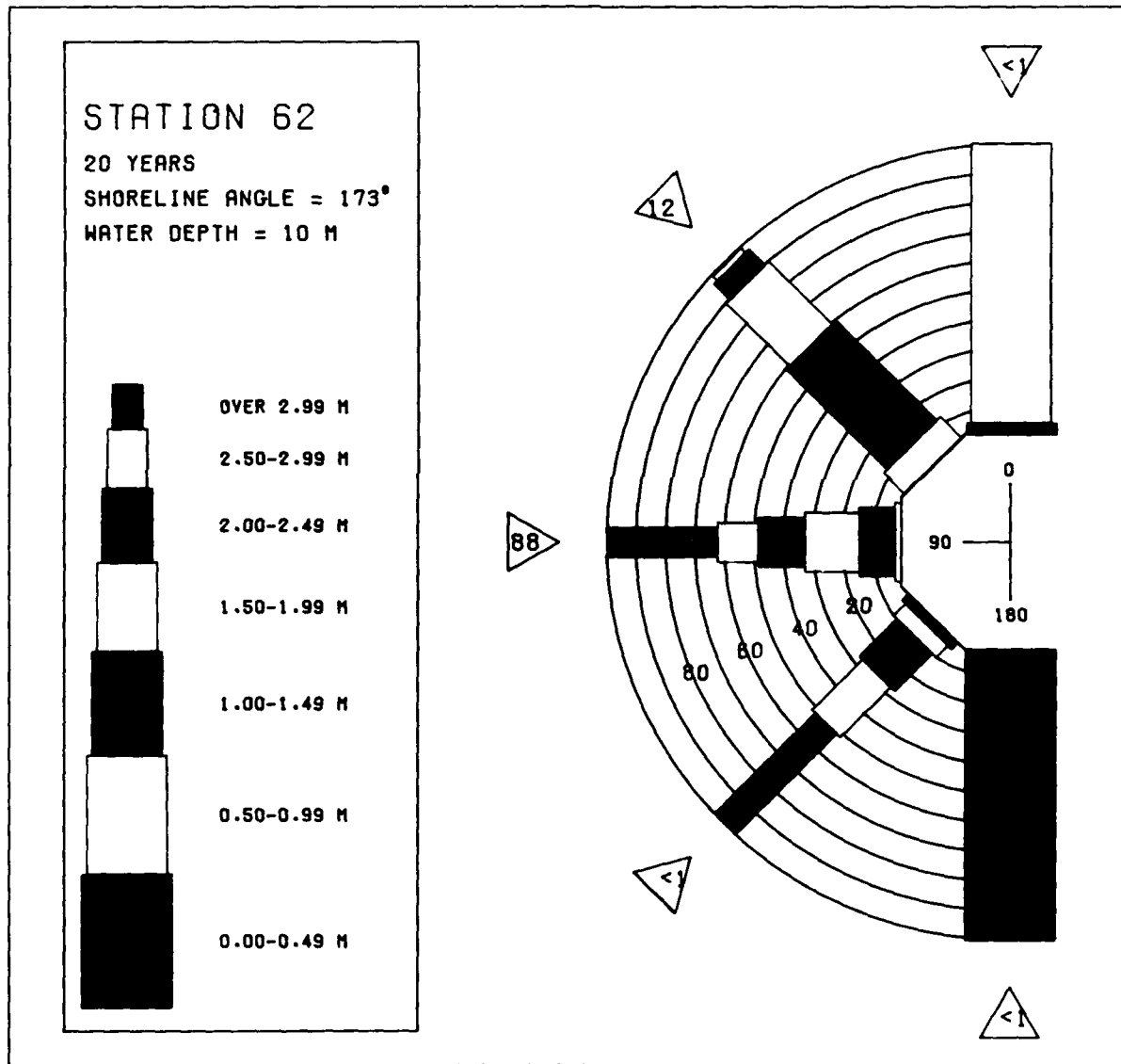
MEAN HS(M) = 1.54 LARGEST HS(M) = 1.85 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 5

PHASE 3 ST. 62 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 41.58N/124.11W LAT. LON. END= 41.48N/124.08W
 SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 - 5.49	0
5.50 - 5.99	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 62 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 41.58N/124.11W LAT. LONG. END= 41.48N/124.08W
SHORELINE ANGLE = 173.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 62 (41.58N/ 124.11W TO 41.48N/ 124.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1955	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1956	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1957	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1958	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1959	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1960	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1961	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1962	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1963	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1964	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1965	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1966	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1967	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1968	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1969	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1970	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1971	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1972	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1973	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1974	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
1975	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5
MEAN	3.7	3.6	3.2	2.6	2.0	1.7	1.5	1.4	1.6	2.5	3.4	3.9	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 62 (41.58N/ 124.11W TO 41.48N/ 124.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1955	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1956	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1957	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1958	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1959	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1960	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1961	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1962	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1963	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1964	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1965	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1966	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1967	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1968	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1969	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1970	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1971	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1972	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1973	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1974	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
1975	6.4	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8

20 YR. STATISTICS FOR PACIFIC STATION 62 (41.58N/ 124.11W TO 41.48N/ 124.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.2
LARGEST WAVE HS	(METERS)	17.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	90.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 41.48N/124.08W LAT. LONG. END= 41.35N/124.08W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 41.48N/124.08W LAT. LONG. END= 41.35N/124.08W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	213	51	.	.	.	.	.	.	.	.	264
1.00-1.49	1442	176	.	.	.	.	.	.	.	.	1618
1.50-1.99	781	65	.	.	.	.	.	.	.	.	846
2.00-2.49	51	.	.	.	.	.	.	.	.	.	51
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2466	434	0	0	0	0	0	0	0	0	2900

MEAN HS(M) = 1.41 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 1697

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 41.48N/124.08W LAT. LONG. END= 41.35N/124.08W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	8	37	5	1	.	.	.	.	.	.	49
0.50-0.99	118	672	527	83	20	23	1	.	.	.	1444
1.00-1.49	550	2147	3256	604	131	18	.	.	.	.	6636
1.50-1.99	485	1493	2710	1144	207	13	.	.	.	.	6852
2.00-2.49	66	568	432	788	167	8	.	.	.	.	2029
2.50-2.99	.	154	162	179	131	39	.	.	.	.	665
3.00-3.49	.	29	73	75	121	15	.	.	.	.	313
3.50-3.99	.	1	15	15	23	11	.	.	.	.	65
4.00-4.49	.	.	3	.	5	13	.	.	.	.	21
4.50-4.99	.	.	.	.	.	3	.	.	.	.	3
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1227	5101	7178	2889	795	146	1	0	0	0	10147

MEAN HS(M) = 1.60 LARGEST HS(M) = 4.64 MEAN TP(SEC) = 8.4 NUMBER OF CASES = 10147

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 41.48N/124.08W LAT. LONG. END= 41.35N/124.08W
 SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	43	227	62	154	43	38	6	.	.	.	717
0.50-0.99	114	277	202	197	117	104	77	5	.	.	1154
1.00-1.49	114	277	202	197	117	104	77	5	.	.	1154
1.50-1.99	114	277	202	197	117	104	77	5	.	.	1154
2.00-2.49	114	277	202	197	117	104	77	5	.	.	1154
2.50-2.99	114	277	202	197	117	104	77	5	.	.	1154
3.00-3.49	114	277	202	197	117	104	77	5	.	.	1154
3.50-3.99	114	277	202	197	117	104	77	5	.	.	1154
4.00-4.49	114	277	202	197	117	104	77	5	.	.	1154
4.50-4.99	114	277	202	197	117	104	77	5	.	.	1154
5.00+	114	277	202	197	117	104	77	5	.	.	1154
TOTAL	75	1472	7469	10904	17132	22765	15036	2457	44	0	45231

MEAN HS(M) = 2.90 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 11.9 NUMBER OF CASES = 45231

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LONG. START= 41.48N/124.08W LAT. LONG. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 155.0 - 164.9
LAT. LONG. START= 41.48N/124.08W LAT. LONG. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

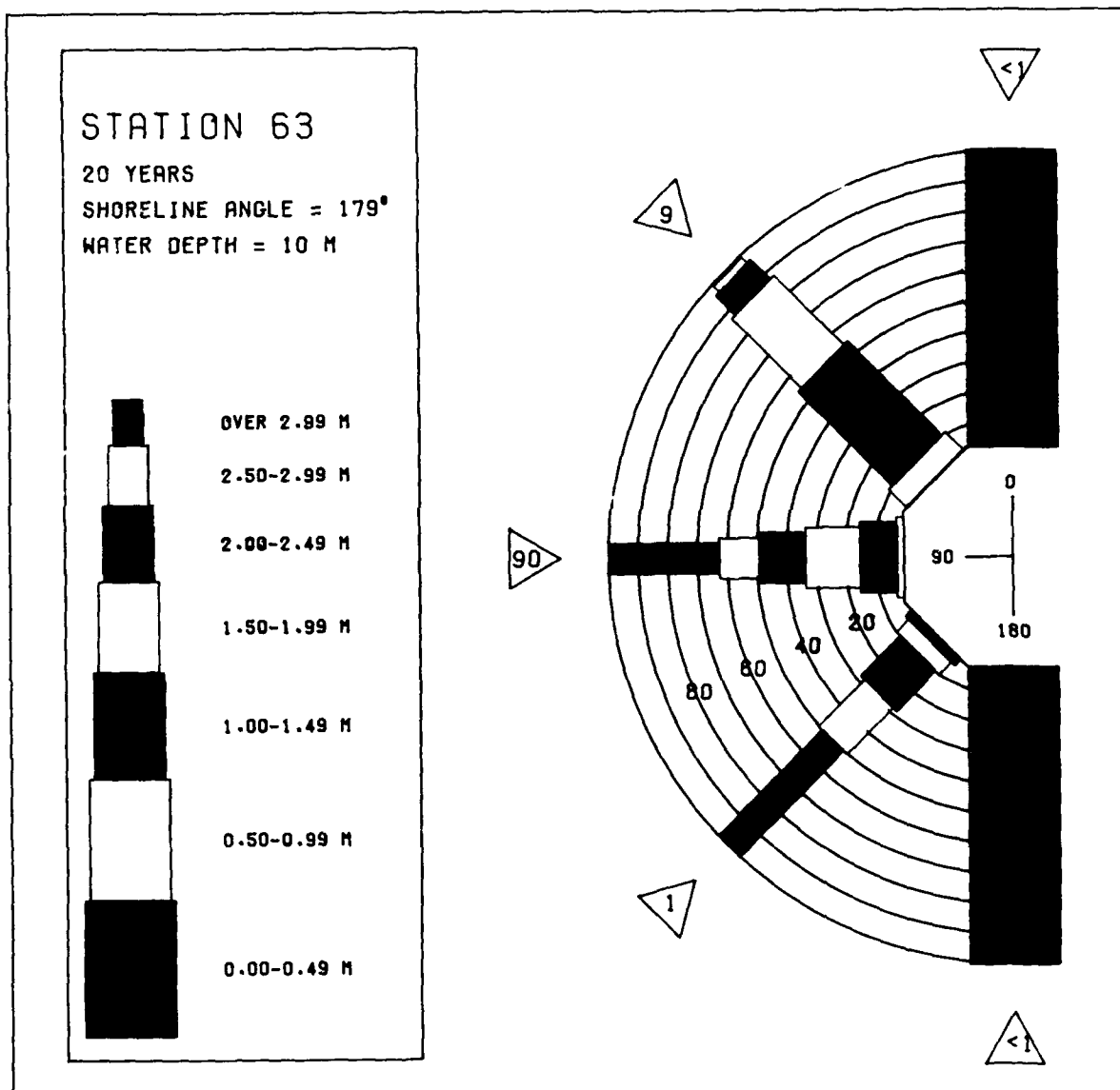
HEIGHT(METERS)	4.4- 6.2	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER				
0.0-0.9	0			
1.0-1.9	0			
2.0-2.9	0			
3.0-3.9	0			
4.0-4.9	0			
5.0-5.9	0			
6.0-6.9	0			
7.0-7.9	0			
8.0-8.9	0			
9.0-9.9	0			
TOTAL	5	4	0	0	0	0	0			
MEAN HS(M) = 1.77	LARGEST HS(M) = 2.58		MEAN TP(SEC) = 6.0		NUMBER OF CASES =		7			

PHASE 3 ST. 63 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LONG. START = 41.48N/124.08W LAT. LONG. END = 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 63 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 41.46N/124.08W LAT. LONG. END= 41.35N/124.08W
SHORELINE ANGLE = 179.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3						
0.0					7	6	1						3
0.50	37	96	116	23	132	143	7						286
1.00	201	286	600	257	383	443	149						1332
1.50	126	208	527	568	558	314	52						958
2.00	13	93	133	353	413	508	31						558
2.50		36	55	104	133	505	195						355
3.00		7	33	60	108	406	226						355
3.50				34	49	225	287						307
4.00			1	17	20	100	226						306
4.50				7	10	58	309						512
5.00													
TOTAL	377	729	1523	1423	1846	2314	1503						
MEAN HS(M) = 2.64		LARGEST HS(M) = 7.81		MEAN TP(SEC) = 11.0		TOTAL CASES =							58440



MONTH

MEAN

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 63 (41.48N/ 124.08W TO 41.35N/ 124.08W)

C74

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 41.35N/124.08W LAT. LONG. END= 41.23N/124.11W
 SHORELINE ANGLE= 192.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 41.35N/124.08W LAT. LONG. END= 41.23N/124.11W
 SHORELINE ANGLE= 192.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	61	10	.	.	.	.	.	.	.	.	71
1.00 - 1.49	766	132	.	.	.	.	.	.	.	.	918
1.50 - 1.99	467	477	.	.	.	.	.	.	.	.	944
2.00 - 2.49	.	58	.	.	.	.	.	.	.	.	58
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1294	697	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.50 LARGEST HS(M) = 2.44 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1165

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 41.35N/124.08W LAT. LONG. END= 41.23N/124.11W
 SHORELINE ANGLE= 192.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	152	232	39	5	8	1	.	.	.	.	432
1.00 - 1.49	303	303	453	68	8	5	.	.	.	.	1030
1.50 - 1.99	1683	1000	248	39	8	5	.	.	.	.	2883
2.00 - 2.49	95	100	137	18	5	.	.	.	.	.	250
2.50 - 2.99	.	333	171	23	1	.	.	.	.	.	527
3.00 - 3.49	.	30	102	18	.	.	.	.	.	.	150
3.50 - 3.99	.	.	29	10	.	.	.	.	.	.	39
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2783	6711	1202	184	28	6	0	0	0	0	0

MEAN HS(M) = 1.76 LARGEST HS(M) = 3.98 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 6389

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 41.35N/124.08W LAT. LONG. END= 41.23N/124.11W
 SHORELINE ANGLE= 192.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	15	42	970	183	66	44	23	5	.	.	1729
1.00 - 1.49	13	79	4320	103	183	402	88	3	.	.	5464
1.50 - 1.99	.	115	2248	357	100	1220	200	3	.	.	3462
2.00 - 2.49	.	30	884	357	90	660	100	3	.	.	1696
2.50 - 2.99	.	.	107	309	185	604	100	3	.	.	1307
3.00 - 3.49	.	.	106	107	231	563	100	3	.	.	1032
3.50 - 3.99	.	.	2	17	63	171	100	3	.	.	350
4.00 - 4.49	.	.	.	.	1	306	100	3	.	.	350
4.50 - 4.99	.	.	.	.	.	100	100	3	.	.	350
5.00 +	.	.	.	.	.	100	100	3	.	.	350
TOTAL	70	1904	10976	12746	17745	23374	15226	2573	57	0	0

MEAN HS(M) = 2.73 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49509

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	.	1	20	3	.	.	.	.	.	.	0
0.99	.	39	85	15	11	.	.	.	.	.	150
1.49	5	18	82	35	25	8	.	.	.	.	173
1.99	.	107	123	83	131	35	.	.	.	.	479
2.49	.	63	130	121	135	70	5	.	.	.	524
2.99	.	25	118	88	150	95	17	.	.	.	493
3.49	.	.	49	34	100	66	23	.	.	.	272
3.99	.	.	15	10	18	30	17	.	.	.	90
4.49	.	.	3	10	8	20	11	.	.	.	52
4.99	.	.	.	.	1	3	.	.	.	.	2
5.00 +	5	253	625	400	595	325	76	0	0	0	1347
TOTAL	5	253	625	400	595	325	76	0	0	0	

MEAN HS(M) = 2.81 LARGEST HS(M) = 6.07 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1347

PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	2	.	.	.	.	.	.	.	.	.	5
0.99	2	8	.	.	.	.	.	.	.	.	14
1.49	3	2	1	.	.	.	.	.	.	.	10
1.99	.	10	3	.	.	.	.	.	.	.	10
2.49	.	.	.	.	.	.	.	.	.	.	0
2.99	.	.	.	.	.	.	.	.	.	.	0
3.49	.	.	.	.	.	.	.	.	.	.	0
3.99	.	.	.	.	.	.	.	.	.	.	0
4.49	.	.	.	.	.	.	.	.	.	.	0
4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	15	27	4	0	0	0	0	0	0	0	30
TOTAL	15	27	4	0	0	0	0	0	0	0	

MEAN HS(M) = 1.41 LARGEST HS(M) = 2.55 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 30

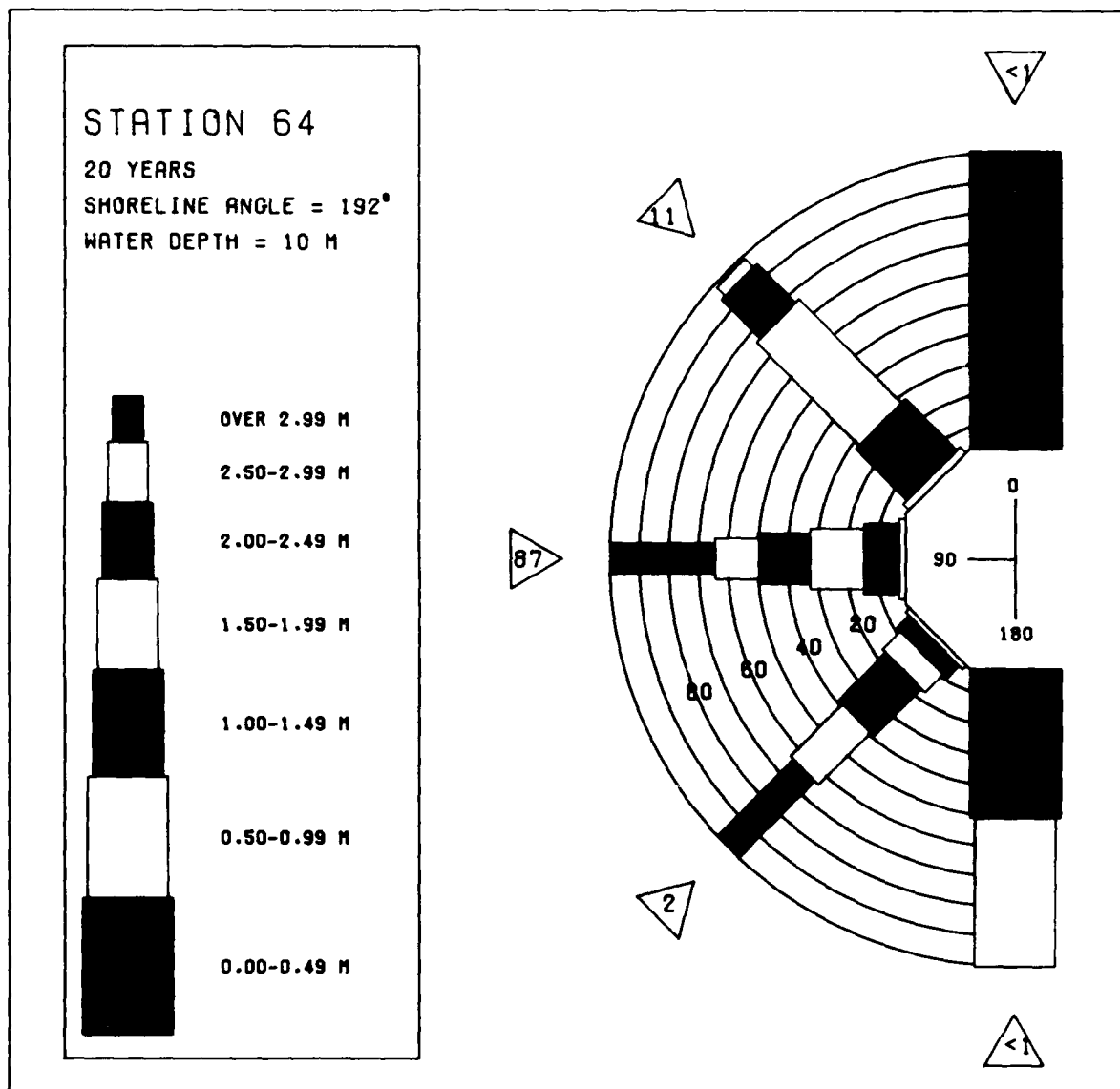
PHASE 3 ST. 64 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 41.35N/124.08W LAT. LON. END= 41.23N/124.11W
 SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	0
0.99	0
1.49	0
1.99	0
2.49	0
2.99	0
3.49	0
3.99	0
4.49	0
4.99	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 64 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 41.35N/124.08W LAT. LONG. END= 41.23N/124.11W
SHORELINE ANGLE = 192.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER		
0.0	-											3	
0.5	-	18	71	103	19	7	4					22	4
1.0	-	169	224	485	254	138	40	2				1203	143
1.5	-	218	375	458	331	367	144	8				1309	9
2.0	-	10	226	116	369	455	369	26				1740	4
2.5	-		50	55	105	434	563	80				1380	0
3.0	-		9	38	41	200	560	221	10			1099	3
3.5	-			18	15	69	402	337	2			931	1
4.0	-			3	6	24	177	272				506	0
4.5	-				2	7	78	240				553	3
5.0	+					30	326	226	13			386	0
TOTAL		415	957	1277	1330	1833	2367	1524	252	3	0		
MEAN HS(M) = 2.60		LARGEST HS(M) = 7.27		MEAN TP(SEC) = 11.0		TOTAL CASES =						58440	



WIS STATION 64 (41.35N/ 124.08W TO 41.23N/ 124.11W)

[illegible]

WIS STATION 64 (41.35N/ 124.08W TO 41.23N/ 124.11W)

[illegible]

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	9.0
MEAN FREQUENCY 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.3
LARGEST WAVE HS	(METERS)	3.7
LARGEST WAVE TP	(SECONDS)	16.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	(DEGREES)	99.4
		69121121

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 41.23N/124.11W LAT. LONG. END= 41.13N/124.16W
 SHORELINE ANGLE= 198.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 41.23N/124.11W LAT. LONG. END= 41.13N/124.16W
 SHORELINE ANGLE= 198.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1347	706	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.63 LARGEST HS(M) = 2.97 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1203

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 41.23N/124.11W LAT. LONG. END= 41.13N/124.16W
 SHORELINE ANGLE= 198.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3236	6944	675	44	4	0	0	0	0	0	0

MEAN HS(M) = 1.87 LARGEST HS(M) = 3.95 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 6378

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 41.23N/124.11W LAT. LONG. END= 41.13N/124.16W
 SHORELINE ANGLE= 198.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

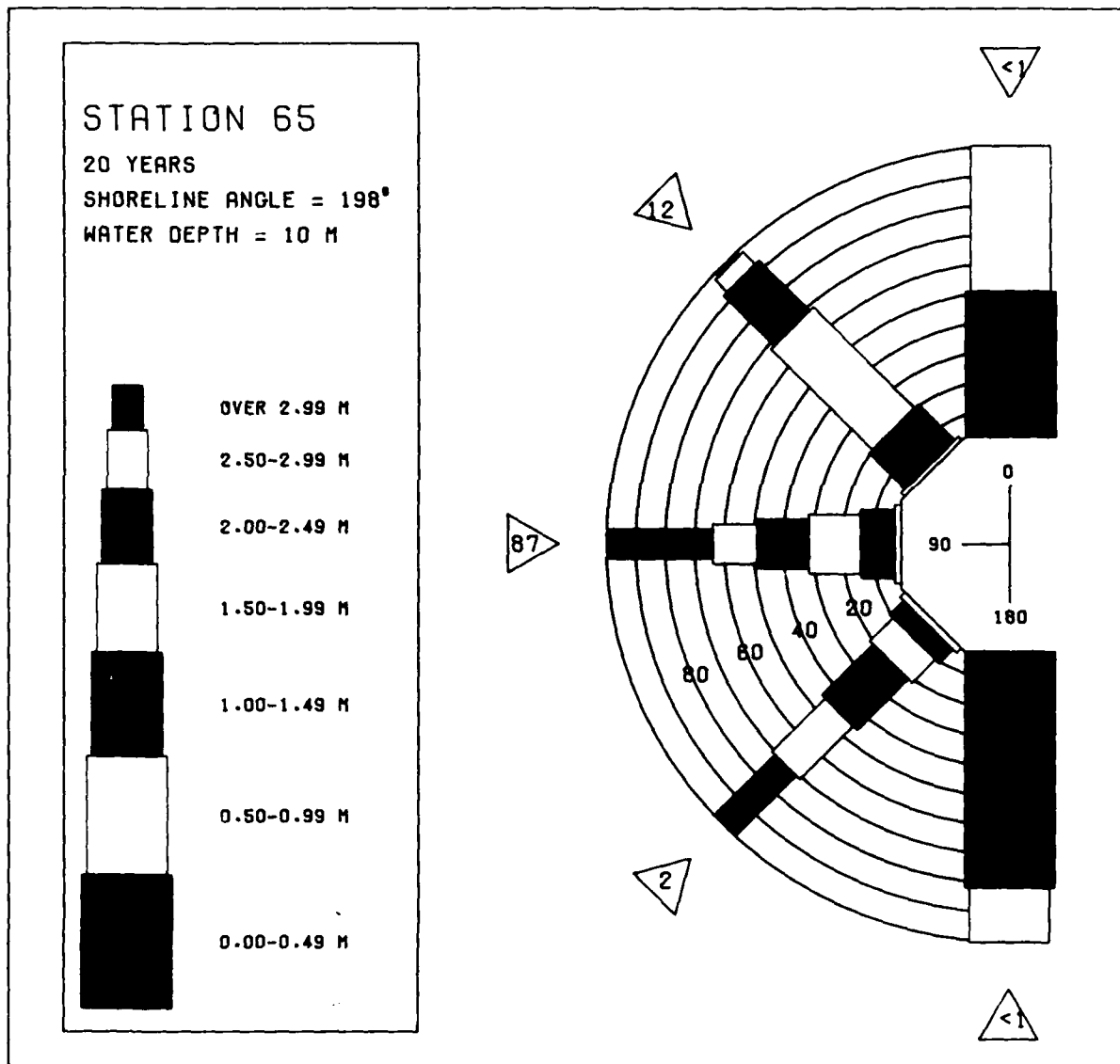
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	149	2128	10882	12434	17581	23343	15225	2589	59	0	0

MEAN HS(M) = 2.74 LARGEST HS(M) = 7.11 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 49340

PHASE 3 ST. 65 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 41.23N/124.11W LAT. LONG. END= 41.13N/124.16W
 SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	0
0.50	0
0.51	0
0.52	0
0.53	0
0.54	0
0.55	0
0.56	0
0.57	0
0.58	0
0.59	0
0.60	0
0.61	0
0.62	0
0.63	0
0.64	0
0.65	0
0.66	0
0.67	0
0.68	0
0.69	0
0.70	0
0.71	0
0.72	0
0.73	0
0.74	0
0.75	0
0.76	0
0.77	0
0.78	0
0.79	0
0.80	0
0.81	0
0.82	0
0.83	0
0.84	0
0.85	0
0.86	0
0.87	0
0.88	0
0.89	0
0.90	0
0.91	0
0.92	0
0.93	0
0.94	0
0.95	0
0.96	0
0.97	0
0.98	0
0.99	0
1.00	0
1.01	0
1.02	0
1.03	0
1.04	0
1.05	0
1.06	0
1.07	0
1.08	0
1.09	0
1.10	0
1.11	0
1.12	0
1.13	0
1.14	0
1.15	0
1.16	0
1.17	0
1.18	0
1.19	0
1.20	0
1.21	0
1.22	0
1.23	0
1.24	0
1.25	0
1.26	0
1.27	0
1.28	0
1.29	0
1.30	0
1.31	0
1.32	0
1.33	0
1.34	0
1.35	0
1.36	0
1.37	0
1.38	0
1.39	0
1.40	0
1.41	0
1.42	0
1.43	0
1.44	0
1.45	0
1.46	0
1.47	0
1.48	0
1.49	0
1.50	0
1.51	0
1.52	0
1.53	0
1.54	0
1.55	0
1.56	0
1.57	0
1.58	0
1.59	0
1.60	0
1.61	0
1.62	0
1.63	0
1.64	0
1.65	0
1.66	0
1.67	0
1.68	0
1.69	0
1.70	0
1.71	0
1.72	0
1.73	0
1.74	0
1.75	0
1.76	0
1.77	0
1.78	0
1.79	0
1.80	0
1.81	0
1.82	0
1.83	0
1.84	0
1.85	0
1.86	0
1.87	0
1.88	0
1.89	0
1.90	0
1.91	0
1.92	0
1.93	0
1.94	0
1.95	0
1.96	0
1.97	0
1.98	0
1.99	0
2.00	0
2.01	0
2.02	0
2.03	0
2.04	0
2.05	0
2.06	0
2.07	0
2.08	0
2.09	0
2.10	0
2.11	0
2.12	0
2.13	0
2.14	0
2.15	0
2.16	0
2.17	0
2.18	0
2.19	0
2.20	0
2.21	0
2.22	0
2.23	0
2.24	0
2.25	0
2.26	0
2.27	0
2.28	0
2.29	0
2.30	0
2.31	0
2.32	0
2.33	0
2.34	0
2.35	0
2.36	0
2.37	0
2.38	0
2.39	0
2.40	0
2.41	0
2.42	0
2.43	0
2.44	0
2.45	.	.									

PHASE 3 ST. 65 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 41.23N/124.11W LAT. LONG. END= 41.13N/124.16W
SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 65 (41.23N/ 124.11W TO 41.13N/ 124.16W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.6	1.7	2.5	3.4	3.7	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 65 (41.23N/ 124.11W TO 41.13N/ 124.16W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

20 YR. STATISTICS FOR PACIFIC STATION 65 (41.23N/ 124.11W TO 41.13N/ 124.16W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	3.6
MEAN PEAK WAVE PERIOD	(SECONDS)	11.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	90-100
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	90-100
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	36
1.00 - 1.49	236	128	.	.	.	.	.	.	.	.	364
1.50 - 1.99	190	101	.	.	.	.	.	.	.	.	291
2.00 - 2.49	742	218	1	.	.	.	.	.	.	.	961
2.50 - 2.99	.	239	1	.	.	.	.	.	.	.	240
3.00 - 3.49	.	6	.	.	.	.	.	.	.	.	6
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2879	3581	9	0	0	0	0	0	0	0	6464

MEAN HS(M) = 1.49 LARGEST HS(M) = 2.75 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 3785

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	64
0.50 - 0.99	47	643	929	148	66	10	10	1	.	.	1854
1.00 - 1.49	258	1878	4329	1729	547	61	1	.	.	.	8803
1.50 - 1.99	217	1158	3348	3528	1707	90	.	.	.	.	10043
2.00 - 2.49	27	639	597	1907	2866	131	6	.	.	.	6173
2.50 - 2.99	.	136	268	331	1728	203	.	.	.	.	2668
3.00 - 3.49	.	8	100	106	528	102	.	.	.	.	1043
3.50 - 3.99	.	1	46	34	114	241	15	.	.	.	451
4.00 - 4.49	.	.	6	15	34	111	8	.	.	.	174
4.50 - 4.99	.	.	.	1	3	53	19	.	.	.	75
5.00 +	.	.	.	.	.	41	47	.	.	.	88
TOTAL	549	4498	9643	7802	7593	1249	76	1	0	0	18376

MEAN HS(M) = 1.84 LARGEST HS(M) = 5.87 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 18376

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1
0.50 - 0.99	.	126	349	88	27	39	18	.	.	.	649
1.00 - 1.49	.	269	1244	1249	1170	402	97	.	.	.	4649
1.50 - 1.99	.	88	1034	1221	1708	1635	396	1	.	.	8393
2.00 - 2.49	.	8	1180	1180	1908	1635	396	1	.	.	8393
2.50 - 2.99	.	.	324	1481	1647	1757	374	1	.	.	10132
3.00 - 3.49	.	.	129	111	417	486	317	1	.	.	4533
3.50 - 3.99	.	.	30	33	188	121	302	1	.	.	7093
4.00 - 4.49	.	.	3	22	20	55	166	1	.	.	4084
4.50 - 4.99	244	181	1	.	.	453
5.00 +	3313
TOTAL	14	583	3458	5689	10376	22099	15050	2546	52	0	35008

MEAN HS(M) = 2.97 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 12.4 NUMBER OF CASES = 35008

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.5	0	
0.5-1.0	0	
1.0-1.5	0	
1.5-2.0	0	
2.0-2.5	0	
2.5-3.0	0	
3.0-3.5	0	
3.5-4.0	0	
4.0-4.5	0	
4.5-5.0	0	
5.0-5.5	0	
5.5-6.0	0	
TOTAL	14	345	659	339	511	206	43	1	0	62	

MEAN HS(M) = 3.20 LARGEST HS(M) = 7.18 MEAN TP(SEC) = 9.7 NUMBER OF CASES = 1252

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.5	0	
0.5-1.0	0	
1.0-1.5	0	
1.5-2.0	0	
2.0-2.5	0	
2.5-3.0	0	
3.0-3.5	0	
3.5-4.0	0	
4.0-4.5	0	
4.5-5.0	0	
5.0-5.5	0	
5.5-6.0	0	
TOTAL	16	13	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.62 LARGEST HS(M) = 2.54 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 19

PHASE 3 ST. 66 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 41.13N/124.16W LAT. LON. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

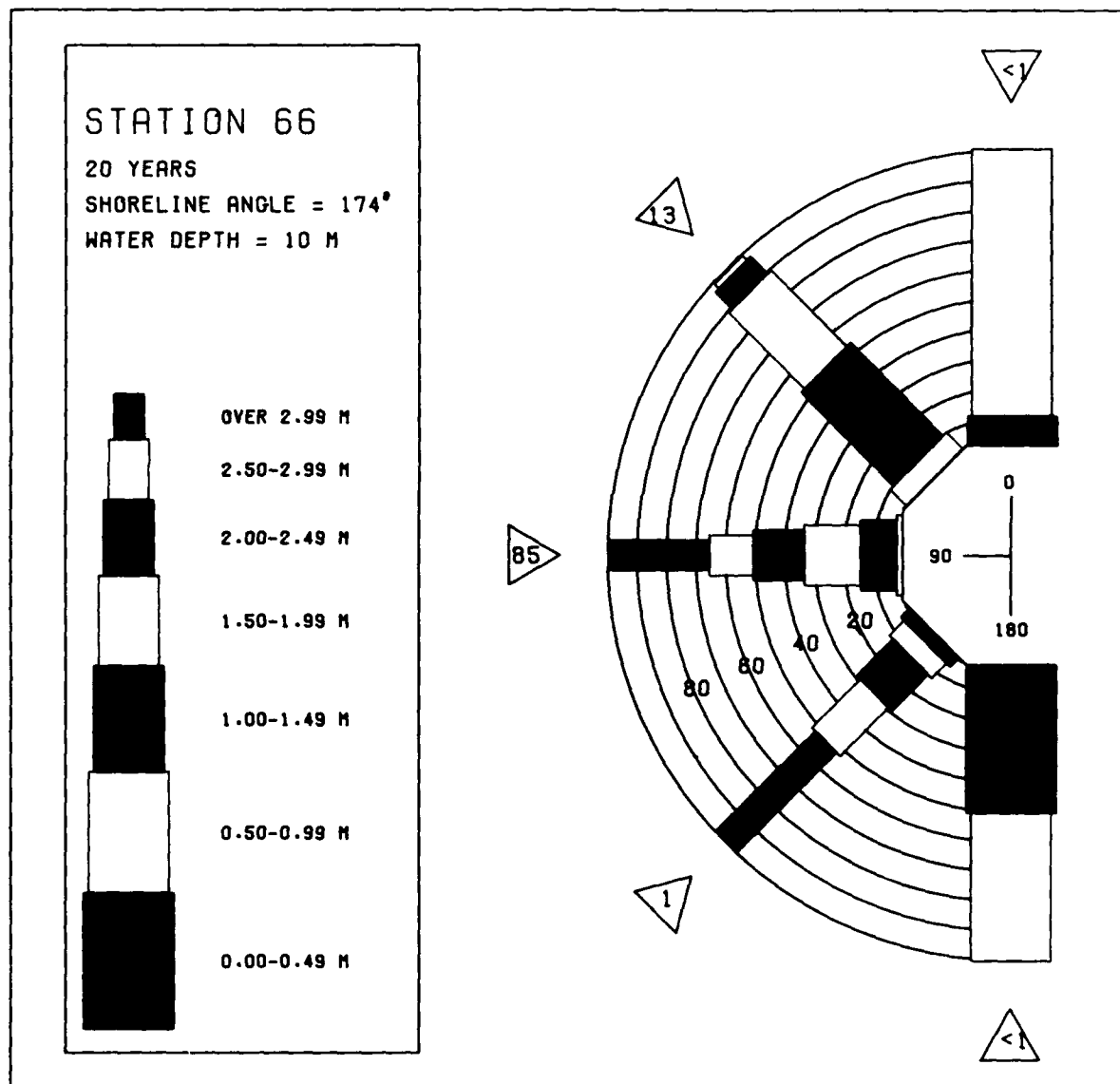
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.5	0	
0.5-1.0	0	
1.0-1.5	0	
1.5-2.0	0	
2.0-2.5	0	
2.5-3.0	0	
3.0-3.5	0	
3.5-4.0	0	
4.0-4.5	0	
4.5-5.0	0	
5.0-5.5	0	
5.5-6.0	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 66 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 41.13N/124.16W LAT. LONG. END= 41.05N/124.15W
 SHORELINE ANGLE = 174.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
OVER 2.99 M	216	314	427	482	171	441	466	300	303	1	1	284
2.50-2.99 M	96	144	202	233	172	172	172	174	174	1	1	1636
2.00-2.49 M	3	3	3	3	577	406	406	300	300	1	1	21360
1.50-1.99 M	..	..	..	..	153	593	593	174	174	1	1	16000
1.00-1.49 M	..	..	..	..	71	356	356	174	174	1	1	13247
0.50-0.99 M	..	..	..	..	31	158	158	174	174	1	1	794
0.00-0.49 M	..	..	..	..	3	62	62	174	174	1	1	497
TOTAL	345	899	1373	1380	1844	2351	1513	1513	251	4	0	341

MEAN HS(M) = 2.52 LARGEST HS(M) = 7.72 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 66 (41.13N/ 124.16W TO 41.05N/ 124.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1957	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1958	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1959	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1960	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1961	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1962	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1963	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1964	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1965	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1966	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1967	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1968	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1969	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1970	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1971	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1972	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1973	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1974	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
1975	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	2.5
MEAN	3.5	3.4	3.1	2.6	2.0	1.7	1.6	1.5	1.6	2.4	3.3	3.7	

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 66 (41.13N/ 124.16W TO 41.05N/ 124.15W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1957	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1958	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1959	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1960	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1961	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1962	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1963	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1964	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1965	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1966	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1967	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1968	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1969	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1970	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1971	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1972	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1973	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1974	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
1975	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0

20 YR. STATISTICS FOR PACIFIC STATION 66 (41.13N/ 124.16W TO 41.05N/ 124.15W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	87.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
 SHORELINE ANGLE= 163.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.16 LARGEST HS(M) = 0.24 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 3

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
 SHORELINE ANGLE= 163.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2342	4993	144	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.77 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 4375

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
 SHORELINE ANGLE= 163.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	229	3547	12101	10911	14080	14963	6475	25	0	0	0

MEAN HS(M) = 2.24 LARGEST HS(M) = 7.12 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 36447

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
 SHORELINE ANGLE= 163.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	12	647	1963	2657	4672	8064	8061	2493	77	0	0

MEAN HS(M) = 3.32 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 12.6 NUMBER OF CASES = 16763

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	.	.	.	.	.	.	.	.	.	0
1.0-1.49	5	11	6	.	.	.	.	.	.	.	34
1.5-1.99	10	100	32	13	3	.	.	.	.	.	168
2.0-2.49	.	120	121	157	29	.	.	.	.	.	399
2.5-2.99	.	120	121	157	29	.	.	.	.	.	399
3.0-3.49	.	.	100	71	68	1	.	.	.	.	250
3.5-3.99	.	.	27	32	97	20	1	.	.	.	178
4.0-4.99	.	.	1	3	27	44	3	0	0	0	114
5.0-5.99	.	.	.	.	.	.	.	.	.	.	79
TOTAL	16	247	514	238	316	101	4	0	0	0	851

MEAN HS(M) = 3.35 LARGEST HS(M) = 6.16 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 851

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	1	.	.	.	.	.	.	.	.	.	1
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.99	0
5.0-5.99	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.95 LARGEST HS(M) = 0.95 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 67 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 41.05N/124.15W LAT. LON. END= 40.98N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

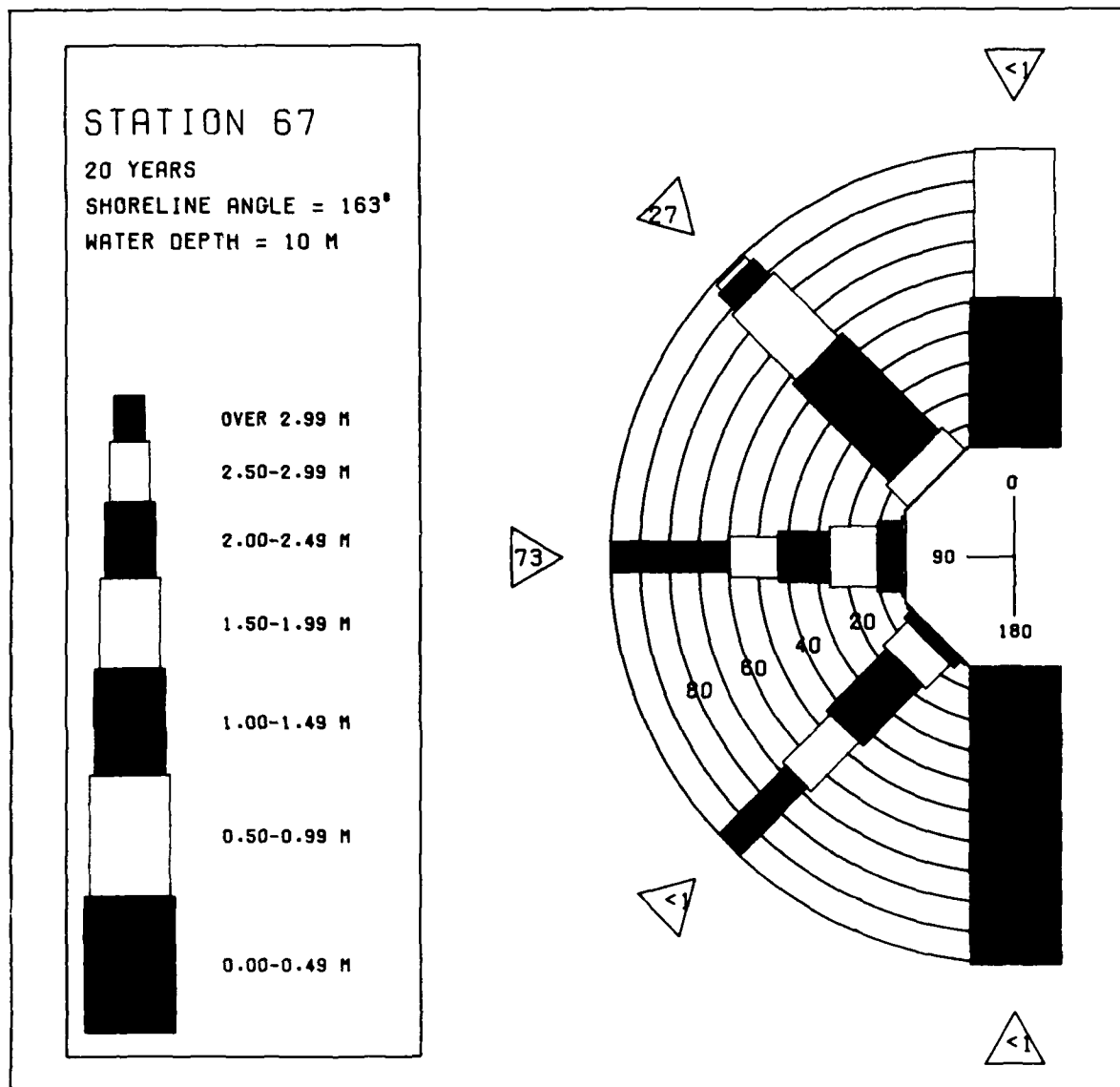
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.99	0
5.0-5.99	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 67 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 41.05N/124.15W LAT. LONG. END = 40.98N/124.11W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-22.3- LONGER	TOTAL
0.00-0.49	2	1	1	2	12	2	3	..	..	..	11
0.50-0.99	40	12	15	22	184	46	9	..	..	..	359
1.00-1.49	175	240	300	317	507	167	27	2	..	..	1855
1.50-1.99	41	73	92	103	322	418	78	5	1	..	1489
2.00-2.49	..	3	11	13	133	60	17	10	..	..	1271
2.50-2.99	..	..	1	2	81	31	28	3	..	..	978
3.00-3.49	..	..	..	20	43	16	10	30	..	..	760
3.50-3.99	..	..	..	9	20	7	1	30	..	..	325
4.00-4.49	..	..	..	2	14	4	1	117	5	0	371
5.00-5.49	..	..	..	..	..	..	..	..	..	..	..
TOTAL	259	941	1469	1377	1904	2309	1448	248	5	0	58440

MEAN HS(M) = 2.50 LARGEST HS(M) = 7.81 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 67 (41.05N/ 124.15W TO 40.98N/ 124.11W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1955	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1956	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1957	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1958	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1959	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1960	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1961	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1962	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1963	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1964	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1965	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1966	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1967	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1968	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1969	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1970	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1971	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1972	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1973	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1974	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
1975	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	2.5
MEAN	3.6	3.5	3.1	2.5	1.9	1.6	1.5	1.4	1.6	2.4	3.2	3.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 67 (41.05N/ 124.15W TO 40.98N/ 124.11W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1955	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1956	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1957	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1958	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1959	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1960	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1961	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1962	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1963	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1964	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1965	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1966	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1967	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1968	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1969	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1970	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1971	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1972	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1973	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1974	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5
1975	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5	0.5

20 YR. STATISTICS FOR PACIFIC STATION 67 (41.05N/ 124.15W TO 40.98N/ 124.11W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.0
LARGEST WAVE HS	(METERS)	16.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121118

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0.0 - 14.9
 LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
 SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 - 5.49	0
5.50 - 5.99	0
6.00 - 6.49	0
6.50 - 6.99	0
7.00 - 7.49	0
7.50 - 7.99	0
8.00 - 8.49	0
8.50 - 8.99	0
9.00 - 9.49	0
9.50 - 9.99	0
10.00 - 10.49	0
10.50 - 10.99	0
11.00 - 11.49	0
11.50 - 11.99	0
12.00 - 12.49	0
12.50 - 12.99	0
13.00 - 13.49	0
13.50 - 13.99	0
14.00 - 14.49	0
14.50 - 14.99	0
15.00 - 15.49	0
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16.00 - 16.49	0
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37.00 - 37.49	0
37.50 - 37.99	0
38.00 - 38.49	0
38.50 - 38.99	0
39.00 - 39.49	0
39.50 - 39.99	0
40.00 - 40.49	0
40.50 - 40.99	0
41.00 - 41.49	0
41.50 - 41.99	0
42.00 - 42.49	0
42.50 - 42.99	0
43.00 - 43.49	0
43.50 - 43.99	0
44.00 - 44.49	0
44.50 - 44.99	0
45.00 - 45.49	0
45.50 - 45.99	0
46.00 - 46.49	0
46.50 - 46.99	0
47.00 - 47.49	0
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48.00 - 48.49	0
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66.00 - 66.49	0
66.50 - 66.99	0
67.00 - 67.49	0
67.50 - 67.99	0
68.00 - 68.49	0
68.50 - 68.99	0
69.00 - 69.49	0
69.50 - 69.99	0
70.00 - 70.49	0
70.50 - 70.99	0
71.00 - 71.49	0
71.50 - 71.99	0
72.00 - 72.49	0
72.50 - 72.99	0
73.00 - 73.49	0
73.50 - 73.99	0
74.00 - 74.49	0
74.50 - 74.99	0
75.00 - 75.49	0
75.50 - 75.99	0
76.00 - 76.49	0
76.50 - 76.99	0
77.00 - 77.49	0
77.50 - 77.99	0
78.00 - 78.49	0
78.50 - 78.99	0
79.00 - 79.49	0
79.50 - 79.99	0
80.00 - 80.49	0
80.50 - 80.99	0
81.00 - 81.49	0
81.50 - 81.99	0
82.00 - 82.49</							

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
 SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	30	20	3	17	1	1	1	1	1	54
0.50 - 0.99	1	22	108	32	17	1	1	1	1	1	321
1.00 - 1.49	1	22	108	32	17	1	1	1	1	1	494
1.50 - 1.99	1	22	108	32	17	1	1	1	1	1	526
2.00 - 2.49	1	22	108	32	17	1	1	1	1	1	552
2.50 - 2.99	1	22	108	32	17	1	1	1	1	1	510
3.00 - 3.49	1	22	108	32	17	1	1	1	1	1	400
3.50 - 3.99	1	22	108	32	17	1	1	1	1	1	177
4.00 - 4.49	1	22	108	32	17	1	1	1	1	1	87
4.50 - 4.99	1	22	108	32	17	1	1	1	1	1	66
5.00 +	1	22	108	32	17	1	1	1	1	1	66
TOTAL	3	346	829	574	754	556	125	0	0	0	

MEAN HS(M) = 2.73 LARGEST HS(M) = 6.43 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1879

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
 SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	29	71	1	1	1	1	1	1	1	1	100
0.50 - 0.99	3	1	1	1	1	1	1	1	1	1	4
1.00 - 1.49	1	1	1	1	1	1	1	1	1	1	0
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	0
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	0
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	0
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	0
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	0
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	0
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	0
5.00 +	1	1	1	1	1	1	1	1	1	1	0
TOTAL	32	72	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.26 LARGEST HS(M) = 0.64 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 62

PHASE 3 ST. 68 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 40.98N/124.11W LAT. LON. END= 40.86N/124.16W
 SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

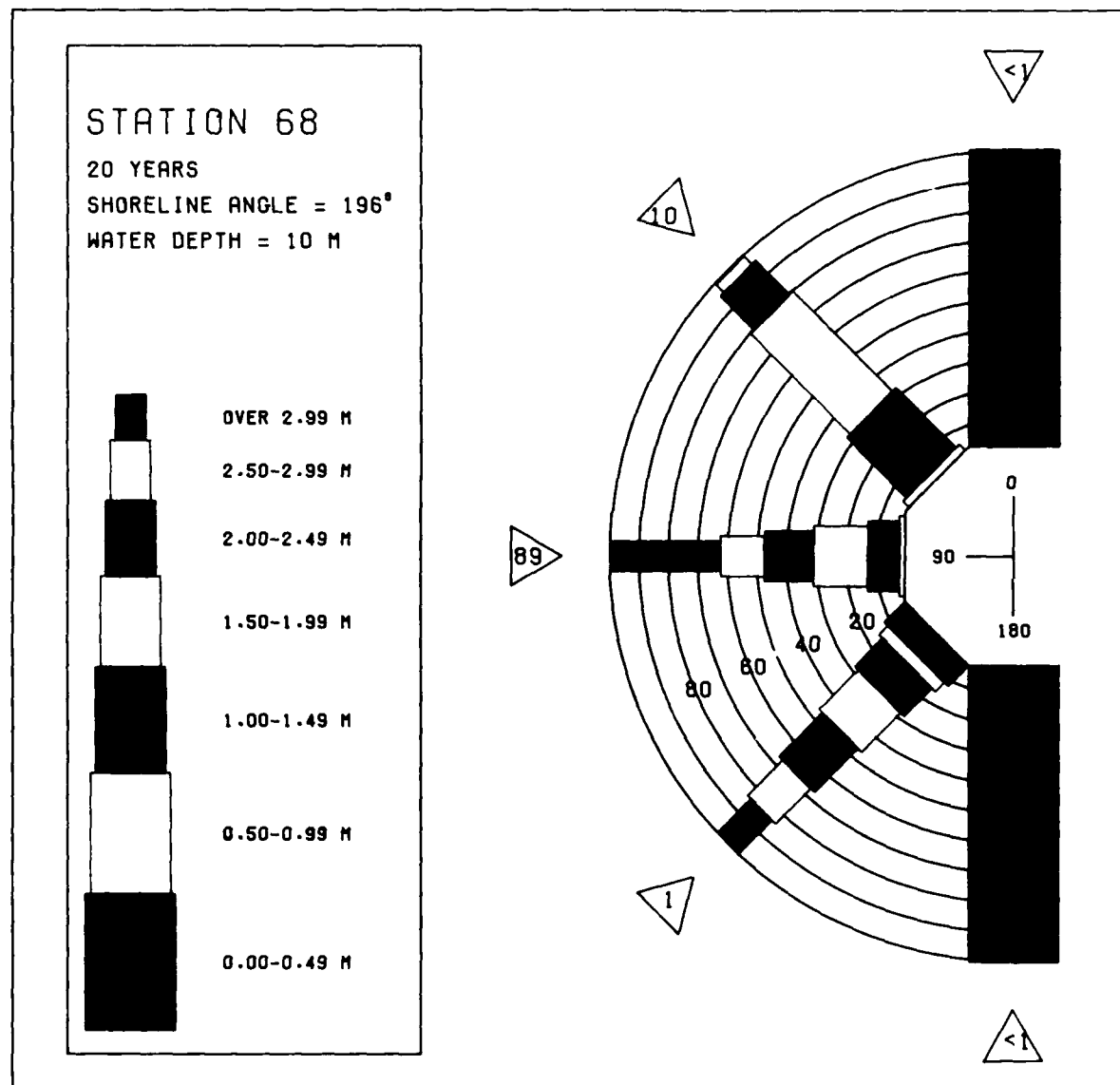
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	1	1	1	1	1	1	1	1	1	1	0
0.50 - 0.99	1	1	1	1	1	1	1	1	1	1	0
1.00 - 1.49	1	1	1	1	1	1	1	1	1	1	0
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	0
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	0
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	0
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	0
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	0
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	0
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	0
5.00 +	1	1	1	1	1	1	1	1	1	1	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 68 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 40.98N/124.11W LAT. LONG. END= 40.86N/124.16W
 SHORELINE ANGLE = 196.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)					15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
					10.6-11.7	11.8-13.3	13.4-15.3						
0.0-0.49	15	10	9	14	15	25	3						14
0.5-0.99	155	277	478	190	179	255	4						196
1.0-1.49	128	433	405	540	377	136	20						1251
1.5-1.99	6	192	135	379	245	54	52						2123
2.0-2.49		58	61	105	215	55	139						1363
2.5-2.99			39	37	87	58	197						1370
3.0-3.49			3	19	23	41	270						1093
3.5-3.99				3	3	17	280						337
4.0-4.49					3	105	253						358
4.5-4.99					3	36	277						359
5.0-5.49							254						254
5.5-5.99													6
6.0-6.49													0
TOTAL	317	1029	1324	1296	1874	2367	1495						58440

MEAN HS(M) = 2.66 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MONTH

MEAN

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 68 (40.98N/ 124.11W TO 40.86N/ 124.16W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	12.7
HIGHEST WAVE PERIOD	(SECONDS)	9.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.2
LARGEST WAVE HS	(METERS)	17.7
LARGEST WAVE TP	(SECONDS)	12.0
DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	60
DIRECTION ASSOCIATED WITH LARGEST WAVE TP	(DEGREES)	60
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	(GREGORIAN)	691212Z

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 40.86N/124.16W LAT. LON. END= 40.75N/124.25W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 - 5.49	0
5.5 - 5.99	0
6.0 - 6.49	0
6.5 - 6.99	0
7.0 - 7.49	0
7.5 - 7.99	0
8.0 - 8.49	0
8.5 - 8.99	0
9.0 - 9.49	0
9.5 - 9.99	0
10.0 - 10.49	0
10.5 - 10.99	0
11.0 - 11.49	0
11.5 - 11.99	0
12.0 - 12.49	0
12.5 - 12.99	0
13.0 - 13.49	0
13.5 - 13.99	0
14.0 - 14.49	0
14.5 - 14.99	0
15.0 - 15.49	0
15.5 - 15.99	0
16.0 - 16.49	0
16.5 - 16.99	0
17.0 - 17.49	0
17.5 - 17.99	0
18.0 - 18.49	0
18.5 - 18.99	0
19.0 - 19.49	0
19.5 - 19.99	0
20.0 - 20.49	0
20.5 - 20.99	0
21.0 - 21.49	0
21.5 - 21.99	0
22.0 - 22.49	0
22.5 - 22.99	0
23.0 - 23.49	0
23.5 - 23.99	0
24.0 - 24.49	0
24.5 - 24.99	0
25.0 - 25.49	0
25.5 - 25.99	0
26.0 - 26.49	0
26.5 - 26.99	0
27.0 - 27.49	0
27.5 - 27.99	0
28.0 - 28.49	0
28.5 - 28.99	0
29.0 - 29.49	0
29.5 - 29.99	0
30.0 - 30.49	0
30.5 - 30.99	0
31.0 - 31.49	0
31.5 - 31.99	0
32.0 - 32.49	0
32.5 - 32.99	0
33.0 - 33.49	0
33.5 - 33.99	0
34.0 - 34.49	0
34.5 - 34.99	0
35.0 - 35.49	0
35.5 - 35.99	0
36.0 - 36.49	0
36.5 - 36.99	0
37.0 - 37.49	0
37.5 - 37.99	0
38.0 - 38.49	0
38.5 - 38.99	0
39.0 - 39.49	0
39.5 - 39.99	0
40.0 - 40.49	0
40.5 - 40.99	0
41.0 - 41.49	0
41.5 - 41.99	0
42.0 - 42.49	0
42.5 - 42.99	0
43.0 - 43.49	0
43.5 - 43.99	0
44.0 - 44.49	0
44.5 - 44.99	0
45.0 - 45.49	0
45.5 - 45.99	0
46.0 - 46.49	0
46.5 - 46.99	0
47.0 - 47.49	0
47.5 - 47.99	0
48.0 - 48.49	0
48.5 - 48.99	0
49.0 - 49.49	0
49.5 - 49.99	0
50.0 - 50.49	0
50.5 - 50.99	0
51.0 - 51.49	0
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66.5 - 66.99	0
67.0 - 67.49	0
67.5 - 67.99	0
68.0 - 68.49	0
68.5 - 68.99	0
69.0 - 69.49	0
69.5 - 69.99	0
70.0 - 70.49	0
70.5 - 70.99	0
71.0 - 71.49	0
71.5 - 71.99	0
72.0 - 72.49	0
72.5 - 72.99	0
73.0 - 73.49	0
73.5 - 73.99	0
74.0 - 74.49	0
74.5 - 74.99	0
75.0 - 75.49	0
75.5 - 75.99	0
76.0 - 76.49	0
76.5 - 76.99	0
77.0 - 77.49	0
77.5 - 77.99	0
78.0 - 78.49	0
78.5 - 78.99	0
79.0 - 79.49	0
79.5 - 79.99	0
80.0 - 80.49	0
80.5 - 80.99	0
81.0 - 81.49	0
81.5 - 81.99	0
82.0 - 82.49	0
82.5 - 82.99	0
83.0 - 83.49	0
83.5 - 83.99	0
84.0 - 84.49	0
84.5 - 84.99	0
85.0 - 85.49	0
85.5 - 85.99	0
86.0 - 86.49	0
86.5 - 86.99	0
87.0 - 87.49	0
87.5 - 87.99	0
88.0 - 88.49	0
88.5 - 88.99	0
89.0 - 89.49	0
89.5 - 89.99	.	.									

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 40.86N/124.16W LAT. LON. END = 40.75N/124.25W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	44	30	1	.	.	.	.	.	.	76
0.50 - 0.99	3	106	241	53	120	20	.	.	.	.	443
1.00 - 1.49	.	75	260	191	146	41	.	.	.	.	683
1.50 - 1.99	3	114	304	220	104	118	.	.	.	.	926
2.00 - 2.49	.	73	209	213	231	34	3	.	.	.	949
2.50 - 2.99	.	15	135	100	82	27	71	.	.	.	679
3.00 - 3.49	.	1	50	23	20	17	63	.	.	.	379
3.50 - 3.99	.	.	15	8	9	13	75	.	.	.	336
4.00 - 4.49	.	.	.	0	3	8	60	.	.	.	498
4.50 - 4.99	.	.	.	.	2	3	4	.	.	.	145
5.00 +	.	.	.	.	.	.	.	.	.	.	.
TOTAL	7	428	1246	892	1461	1194	373	3	0	0	3290

MEAN HS(M) = 2.83 LARGEST HS(M) = 6.37 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 3290

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 40.86N/124.16W LAT. LON. END = 40.75N/124.25W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	15	.	.	.	.	.	.	.	.	32
0.50 - 0.99	5	47	.	.	.	.	.	.	.	.	59
1.00 - 1.49	3	11	15	.	.	.	.	.	.	.	30
1.50 - 1.99	.	3	6	.	.	.	.	.	.	.	9
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	25	84	26	0	0	0	0	0	0	0	82

MEAN HS(M) = 0.94 LARGEST HS(M) = 2.24 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 82

PHASE 3 ST. 69 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 40.86N/124.16W LAT. LON. END = 40.75N/124.25W
 SHORELINE ANGLE = 205.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

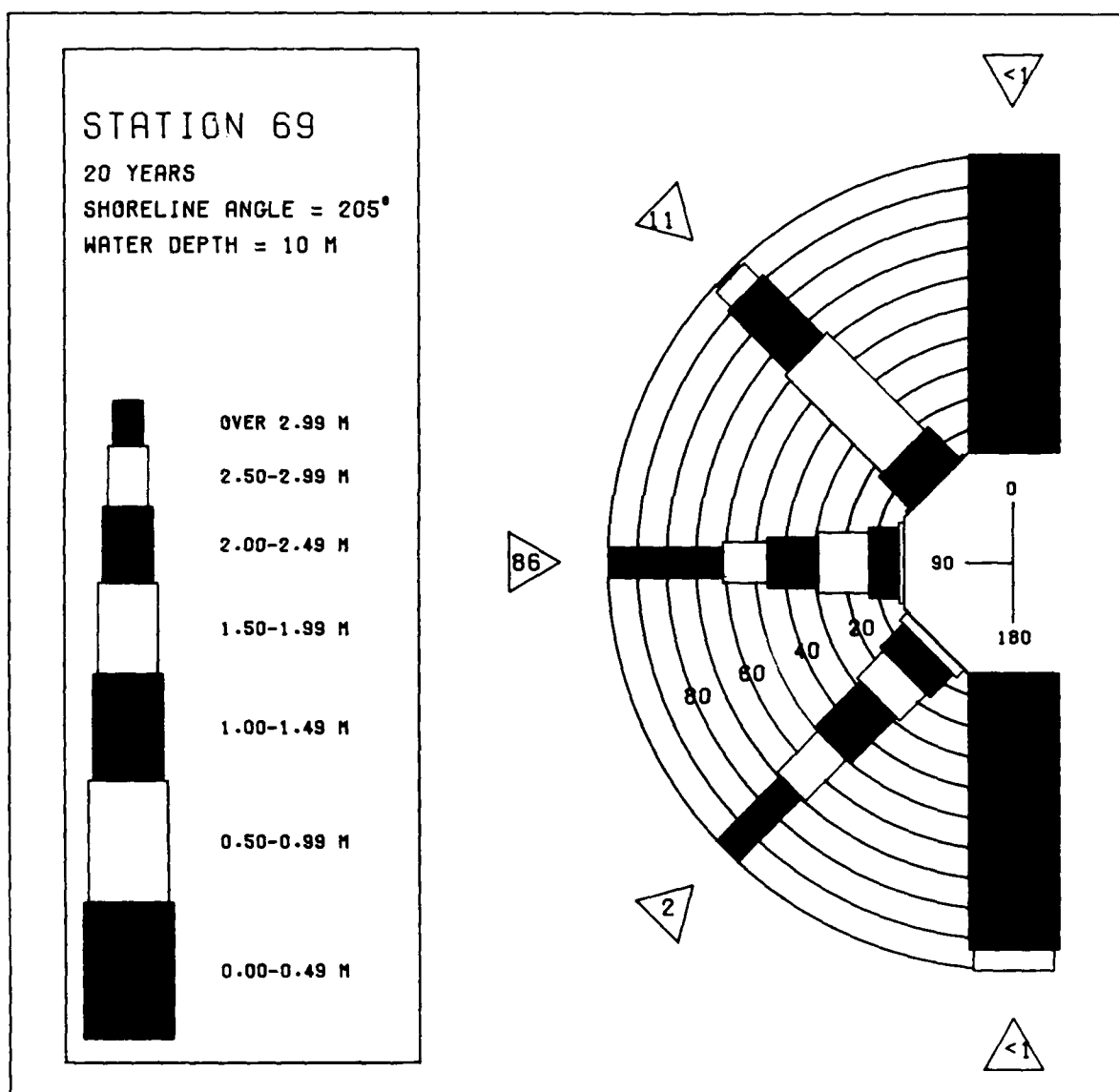
HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 69 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 40.66N/124.16W LAT. LONG. END= 40.75N/124.25W
 SHORELINE ANGLE = 205.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-22.3- LONGER	TOTAL
100	1	1	1	1	1	1	1	1	1	1	1
95	1	1	1	1	1	1	1	1	1	1	1
90	1	1	1	1	1	1	1	1	1	1	1
85	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1
75	1	1	1	1	1	1	1	1	1	1	1
70	1	1	1	1	1	1	1	1	1	1	1
65	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1
55	1	1	1	1	1	1	1	1	1	1	1
50	1	1	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1
35	1	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1	1
TOTAL	423	1165	1219	1202	1838	2356	1495	255	6	0	58440

MEAN HS(M) = 2.70 LARGEST HS(M) = 7.62 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

[illegible]

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MEAN SIGNIFICANT WAVE HEIGHT . . . (METERS)
MEAN PEAK WAVE PERIOD . . . (SECONDS)
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . (DEGREES)
STANDARD DEVIATION OF WAVE HS . . (METERS)
STANDARD DEVIATION OF WAVE TP . . (SECONDS)
WAVE HS ASSOCIATED WITH LARGEST WAVE HS . . (METERS)
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)

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2.7
10.9
90.0
1.2
2.6
7.6
16.7
93.3
69121209

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE= 206.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE= 206.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	.	.	.	.	.	.	.	.	.	7
1.00-1.49	258	1	.	.	.	.	.	.	.	.	288
1.50-1.99	138	140	.	.	.	.	.	.	.	.	278
2.00-2.49	1	56	.	.	.	.	.	.	.	.	57
2.50-2.99	.	5	.	.	.	.	.	.	.	.	5
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	403	232	0	0	0	0	0	0	0	0	374

MEAN HS(M) = 1.57 LARGEST HS(M) = 2.59 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 374

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE= 206.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	.	.	.	.	.	.	.	.	.	0
1.00-1.49	283	742	2	.	.	.	.	.	.	.	1330
1.50-1.99	233	3112	2	.	.	.	.	.	.	.	3657
2.00-2.49	237	3680	92	.	.	.	.	.	.	.	4309
2.50-2.99	.	124	243	1	.	.	.	.	.	.	367
3.00-3.49	.	118	167	11	.	.	.	.	.	.	291
3.50-3.99	.	8	10	.	.	.	.	.	.	.	25
4.00-4.49	.	.	.	.	.	.	.	.	.	.	10
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3817	8664	681	18	0	0	0	0	0	0	7712

MEAN HS(M) = 1.97 LARGEST HS(M) = 4.18 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 7712

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE= 206.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	22	15	10	3	5	5	32	5	1	.	1413
1.00-1.49	111	347	807	123	54	22	1139	51	1	.	17703
1.50-1.99	106	954	3672	1873	999	1239	176	23	1	.	13368
2.00-2.49	35	651	3759	4154	3359	2492	176	71	1	.	13766
2.50-2.99	.	331	1146	3511	5097	5039	578	153	15	.	12233
3.00-3.49	.	203	260	971	4358	5039	1334	53	15	.	10436
3.50-3.99	.	22	213	282	2178	5576	1971	184	10	.	7739
4.00-4.49	.	1	112	92	595	4021	2618	266	3	.	3333
4.50-4.99	.	.	22	63	150	2073	2754	260	11	.	3685
5.00+	.	.	1	18	27	932	2416	285	6	.	4392
TOTAL	274	2524	10002	10890	16818	22322	14607	2180	84	0	46835

MEAN HS(M) = 2.83 LARGEST HS(M) = 7.59 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 46835

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	46	33	1	1	22	1	1	1	1	80
1.00 - 0.99	3	109	254	70	37	44	1	1	1	1	495
1.50 - 1.49	1	77	282	198	131	124	1	1	1	1	732
2.00 - 1.99	3	111	309	246	280	258	3	1	1	1	1067
2.50 - 2.49	1	15	195	215	322	319	7	1	1	1	1062
3.00 - 2.99	1	15	142	100	249	255	70	1	1	1	988
3.50 - 3.49	1	1	53	77	94	133	66	1	1	1	687
4.00 - 3.99	1	1	13	23	41	88	73	1	1	1	336
4.50 - 4.49	1	1	1	8	22	53	66	1	1	1	203
5.00 +	7	436	1280	939	1517	1266	394	3	0	0	142
TOTAL	7	436	1280	939	1517	1266	394	3	0	0	

MEAN HS(M) = 2.80 LARGEST HS(M) = 6.32 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 3429

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	23	1	1	1	1	1	1	1	1	40
1.00 - 0.99	3	42	15	1	1	1	1	1	1	1	46
1.50 - 1.49	3	11	6	1	1	1	1	1	1	1	23
2.00 - 1.99	1	1	1	1	1	1	1	1	1	1	20
2.50 - 2.49	1	1	1	1	1	1	1	1	1	1	9
3.00 - 2.99	1	1	1	1	1	1	1	1	1	1	9
3.50 - 3.49	1	1	1	1	1	1	1	1	1	1	9
4.00 - 3.99	1	1	1	1	1	1	1	1	1	1	9
4.50 - 4.49	1	1	1	1	1	1	1	1	1	1	9
5.00 +	23	85	30	0	0	0	0	0	0	0	0
TOTAL	23	85	30	0	0	0	0	0	0	0	

MEAN HS(M) = 0.94 LARGEST HS(M) = 2.32 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 85

PHASE 3 ST. 70 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	1	1	1	1	1	1	1	1	1	10
1.00 - 0.99	1	1	1	1	1	1	1	1	1	1	10
1.50 - 1.49	1	1	1	1	1	1	1	1	1	1	10
2.00 - 1.99	1	1	1	1	1	1	1	1	1	1	10
2.50 - 2.49	1	1	1	1	1	1	1	1	1	1	10
3.00 - 2.99	1	1	1	1	1	1	1	1	1	1	10
3.50 - 3.49	1	1	1	1	1	1	1	1	1	1	10
4.00 - 3.99	1	1	1	1	1	1	1	1	1	1	10
4.50 - 4.49	1	1	1	1	1	1	1	1	1	1	10
5.00 +	1	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.61 LARGEST HS(M) = 0.61 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 70 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 40.75N/124.25W LAT. LONG. END= 40.65N/124.31W
 SHORELINE ANGLE = 206.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.00-0.49	1	4	1	12	5	2	3	..	..	..	6
0.50-0.99	126	184	396	174	103	26	5	..	..	..	1066
1.00-1.49	288	399	411	435	349	118	17	..	..	..	1014
1.50-1.99	27	418	375	375	263	111	58	..	..	..	1039
2.00-2.49	..	120	155	118	46	89	137	2	..	..	1443
2.50-2.99	..	15	70	39	25	33	204	5	1	..	1713
3.00-3.49	..	1	23	18	24	42	70	1	1	..	1455
3.50-3.99	..	..	4	8	24	40	82	26	1	..	899
4.00-4.49	..	..	..	2	6	10	33	26	..	..	355
4.50-4.99	..	..	..	..	3	2	46	30	..	..	86
5.00+	..	..	..	..	..	..	74	143	..	..	452
TOTAL	451	1192	1196	1181	1829	2354	1498	255	6	0	58440

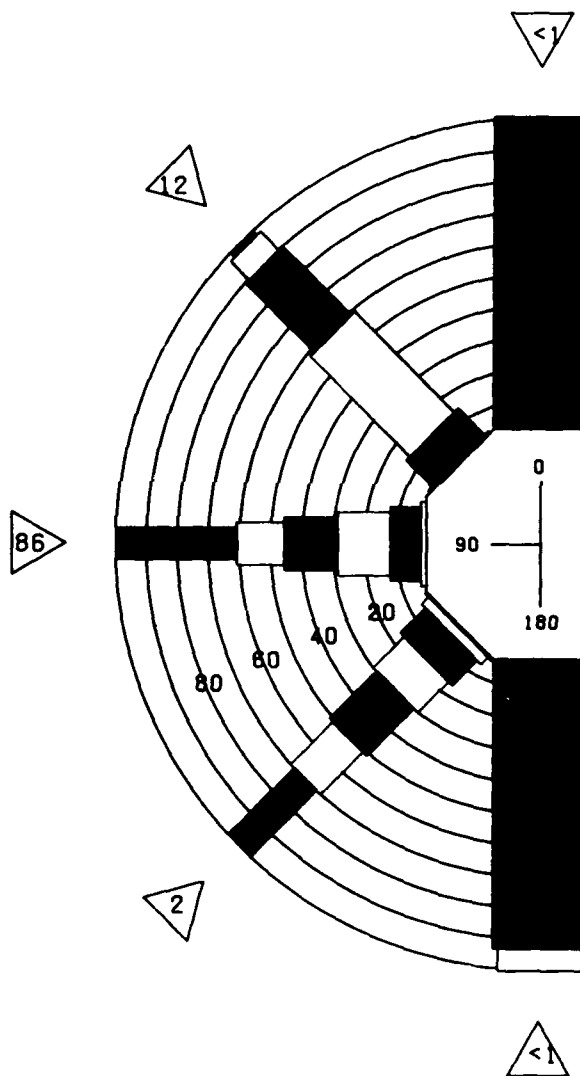
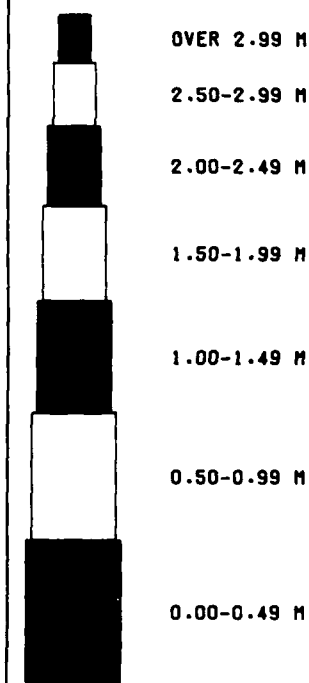
MEAN HS(M) = 2.70 LARGEST HS(M) = 7.59 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440

STATION 70

20 YEARS

SHORELINE ANGLE = 206°

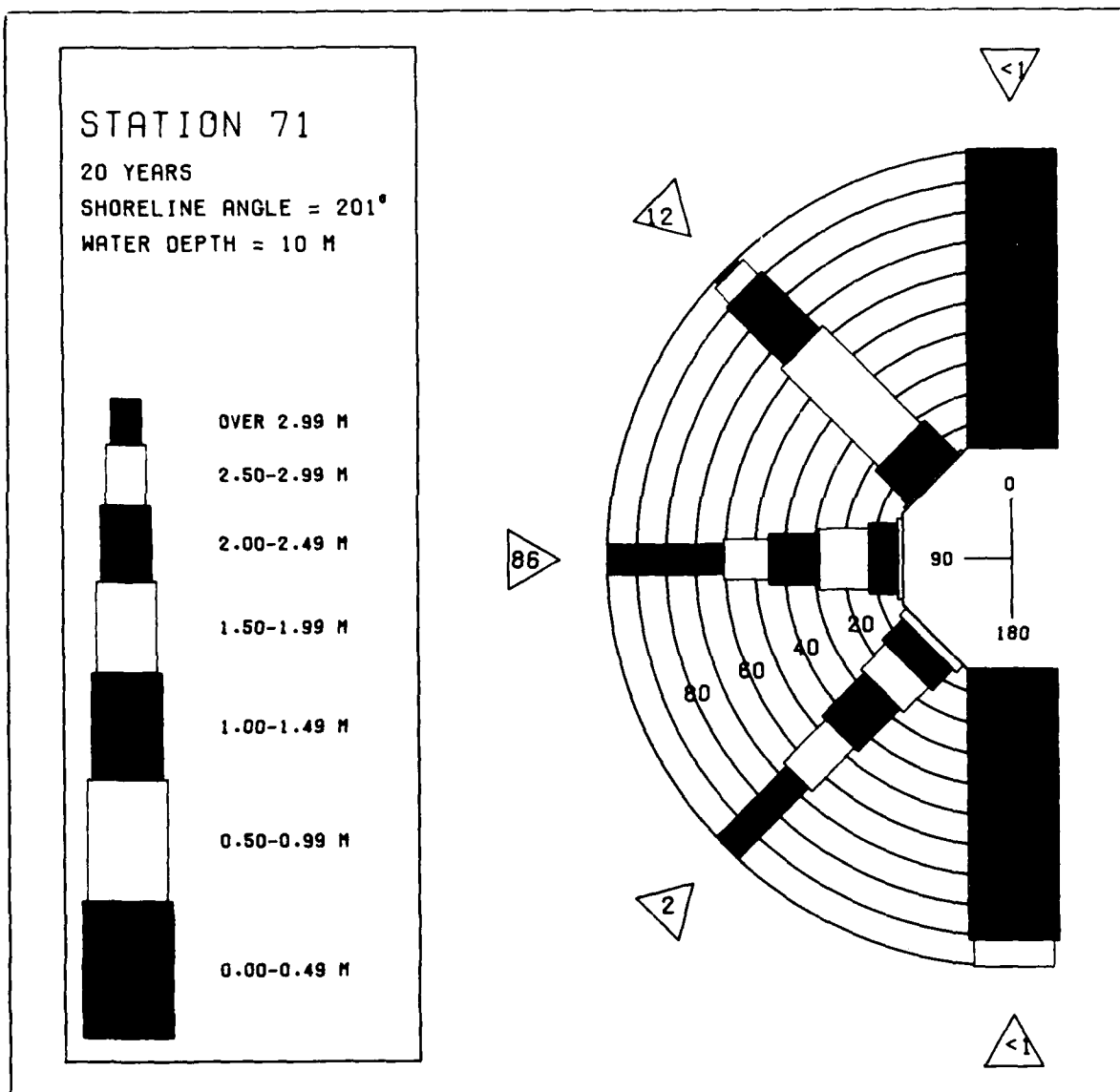
WATER DEPTH = 10 M



PHASE 3 ST. 71 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 40.65N/124.31W LAT. LON. END= 40.53N/124.36W
 SHORELINE ANGLE = 201.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.50 - 0.49	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	5
1.00 - 0.99	139	199	402	173	103	24	3	..	..	..	167
1.50 - 0.99	257	422	427	451	350	118	17	..	..	..	1042
2.00 - 0.99	21	373	154	381	541	302	154	2	..	..	2044
2.50 - 0.99	..	99	73	118	470	521	134	6	..	..	1832
3.00 - 0.99	..	12	50	42	245	589	197	17	1	..	1421
3.50 - 0.99	..	..	24	20	94	421	263	26	3	..	1153
4.00 - 0.99	..	..	..	3	28	230	279	25	1	..	851
4.50 - 0.99	..	..	..	..	8	107	254	28	..	..	576
5.00 - 0.99	..	..	..	..	3	40	285	144	..	..	400
TOTAL	427	1160	1219	1209	1844	2354	1491	253	6	0	472

MEAN HS(M) = 2.71 LARGEST HS(M) = 7.74 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 71 (40.65N/ 124.31W TO 40.53N/ 124.36W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1955	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1956	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1957	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1958	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1959	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1960	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1961	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1962	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1963	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1964	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1965	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
1966	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9
MEAN	3.6	3.6	3.3	2.8	2.2	1.9	1.8	1.6	1.8	2.6	3.5	3.9

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 71 (40.65N/ 124.31W TO 40.53N/ 124.36W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1955	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1956	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1957	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1958	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1959	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1960	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1961	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1962	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1963	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1964	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1965	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
1966	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0
MEAN	6.0	5.0	5.5	5.7	5.0	5.4	5.3	5.6	5.6	5.0	5.4	5.0

20 YR. STATISTICS FOR PACIFIC STATION 71 (40.65N/ 124.31W TO 40.53N/ 124.36W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.2
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	91.9
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		121209

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
 SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	41	3	.	.	.	.	.	.	0
0.50-1.00	.	5	71	13	25	.	.	.	.	.	49
1.01-1.49	8	54	88	37	59	23	.	.	.	.	171
1.50-1.99	5	23	106	142	65	1	.	.	.	.	235
2.00-2.49	1	46	90	147	61	8	.	.	.	.	508
2.50-2.99	.	23	65	54	73	87	23	.	.	.	442
3.00-3.49	.	1	18	10	51	37	20	.	.	.	330
3.50-3.99	.	.	1	8	1	27	11	.	.	.	137
4.00-4.49	.	.	.	1	6	20	.	.	.	.	54
4.50-4.99	.	.	.	.	.	.	.	.	.	.	22
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	228	492	322	509	320	63	0	0	0	

MEAN HS(M) = 2.55 LARGEST HS(M) = 4.97 MEAN TP(SEC) = 10.2 NUMBER OF CASES = 1154

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
 SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	25
0.50-1.00	1	1	17	.	.	.	.	.	.	.	200
1.01-1.49	1	1	13	.	.	.	.	.	.	.	200
1.50-1.99	8	23	1	.	.	.	.	.	.	.	40
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	75	39	0	0	0	0	0	0	0	

MEAN HS(M) = 1.24 LARGEST HS(M) = 2.27 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 78

PHASE 3 ST. 72 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
 SHORELINE ANGLE = 198.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

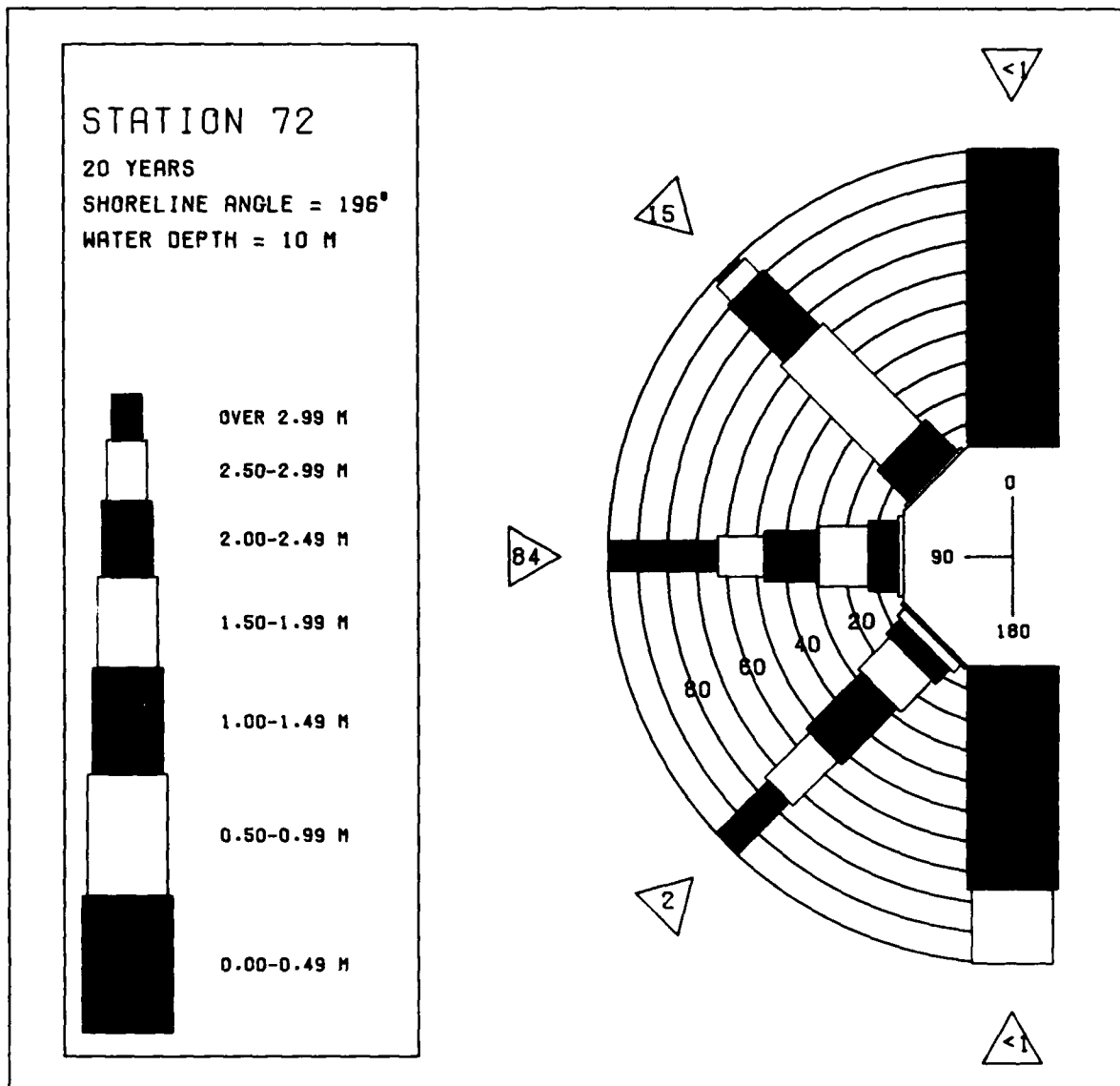
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.00	0
1.01-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 72 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 40.53N/124.36W LAT. LON. END= 40.43N/124.40W
 SHORELINE ANGLE = 196.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	8	3	1	14	7	4	3	.	.	.	4
0.5-0.99	126	44	92	208	120	32	4	.	.	.	171
1.0-1.49	274	197	379	425	393	130	28	3	.	.	1068
1.5-1.99	20	501	386	425	574	368	63	3	.	.	2140
2.0-2.49	.	400	148	361	432	577	157	10	2	.	1973
2.5-2.99	.	66	79	103	212	585	236	22	3	.	1455
3.0-3.49	.	14	43	36	60	382	270	29	2	.	1151
3.5-3.99	.	.	3	14	21	161	262	26	1	.	771
4.0-4.49	.	.	.	5	3	69	244	26	.	.	499
4.5-4.99	.	.	.	.	.	26	218	141	1	.	343
5.00+	.	.	.	.	.	.	26	26	.	.	332
TOTAL	428	1255	1145	1166	1821	2354	1515	266	10	0	58440

MEAN HS(M) = 2.63 LARGEST HS(M) = 7.12 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 72 (40.53N/ 124.36W TO 40.43N/ 124.40W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1957	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1958	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1959	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1960	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1961	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1962	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1963	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1964	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1965	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1966	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1967	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1968	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1969	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1970	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1971	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1972	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1973	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1974	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1975	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
MEAN	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	

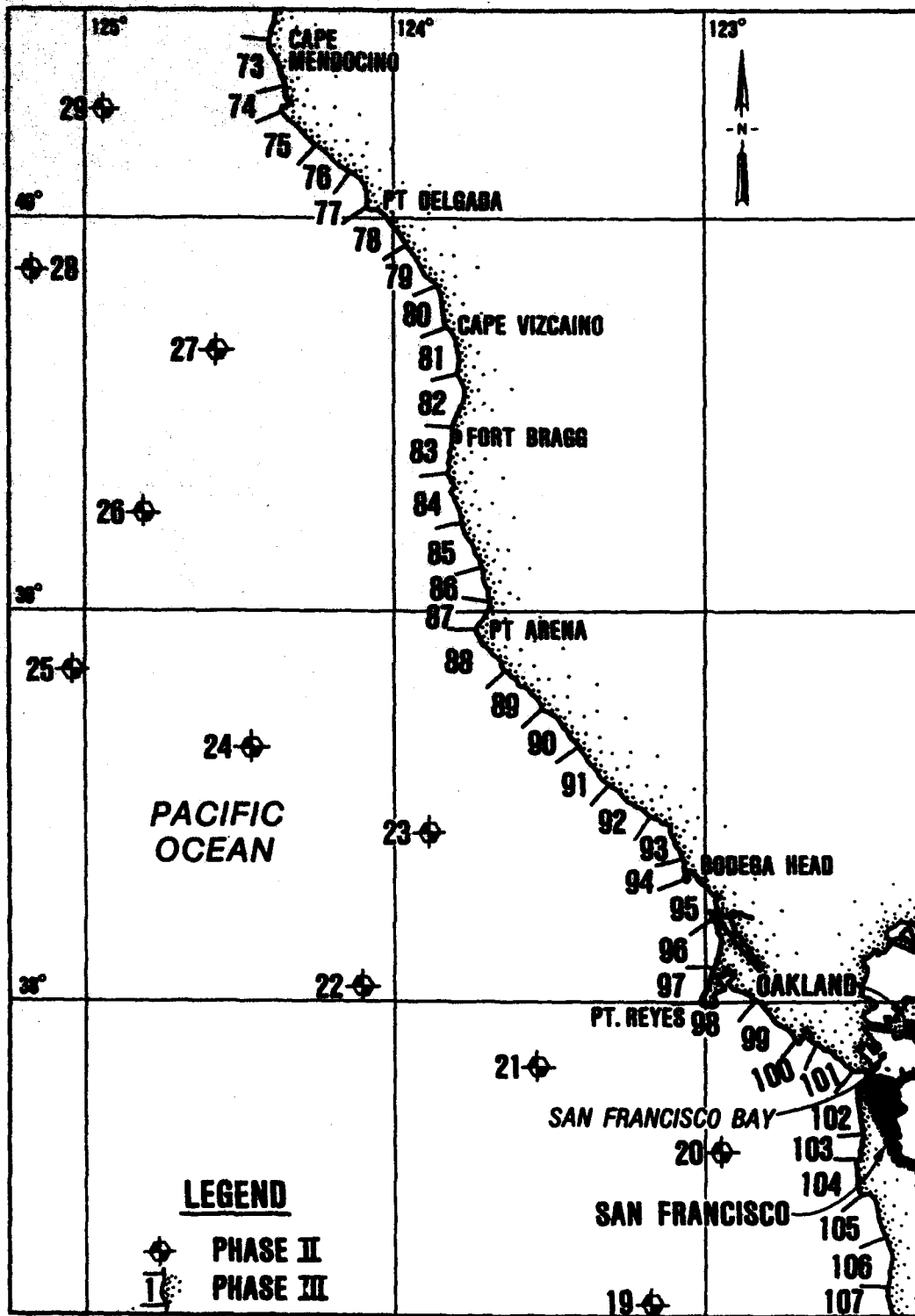
LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 72 (40.53N/ 124.36W TO 40.43N/ 124.40W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1957	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1958	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1959	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1960	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1961	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1962	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1963	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1964	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1965	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1966	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1967	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1968	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1969	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1970	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1971	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1972	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1973	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1974	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	
1975	3.4	3.5	3.2	2.7	2.1	1.9	1.8	1.7	1.8	2.5	3.3	3.7	

20 YR. STATISTICS FOR PACIFIC STATION 72 (40.53N/ 124.36W TO 40.43N/ 124.40W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	16.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	90.4
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69121121
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		

Appendix D: Sta 73 through 105



PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0.0 - 14.9
 LAT. LONG. START= 40.43N/124.40W LAT. LONG. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	15										15
0.5 - 0.99											0
1.0 - 1.49											0
1.5 - 1.99											0
2.0 - 2.49											0
2.5 - 2.99											0
3.0 - 3.49											0
3.5 - 3.99											0
4.0 - 4.49											0
4.5 - 4.99											0
5.0 - 5.49											0
5.5 - 5.99											0
TOTAL	15	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.15 LARGEST HS(M) = 0.27 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 9

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 40.43N/124.40W LAT. LONG. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	63	87	10								77
0.5 - 0.99	423	374	16								1308
1.0 - 1.49	1560	1244	189								4793
1.5 - 1.99	313	167	23								2133
2.0 - 2.49											0
2.5 - 2.99											0
3.0 - 3.49											0
3.5 - 3.99											0
4.0 - 4.49											0
4.5 - 4.99											0
5.0 - 5.49											0
5.5 - 5.99											0
TOTAL	2318	1955	396	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.30 LARGEST HS(M) = 2.37 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 5071

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 40.43N/124.40W LAT. LONG. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	22	17	34	5	10	53	39	10			81
0.5 - 0.99	51	699	1666	309	2162	549	58				2950
1.0 - 1.49	68	1553	6538	3601	2104	549	58				14454
1.5 - 1.99	11	559	3008	5651	5326	1708	292	17	3		16722
2.0 - 2.49		121	258	1593	5119	3875	672	10			12225
2.5 - 2.99		6	20	379	2197	5001	1091	5			6552
3.0 - 3.49			100	201	677	3413	1711	20			6129
3.5 - 3.99			3	15	225	1755	1889	3			3941
4.0 - 4.49					66	689	1678	1			2452
4.5 - 4.99					3	225	1047	3			1283
5.0 - 5.49					121	121	602	3			729
TOTAL	152	3348	12179	11803	15892	17489	9079	72	3	0	0

MEAN HS(M) = 2.24 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 40939

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 40.43N/124.40W LAT. LONG. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	6	68	39	5	6	5	5			0
0.5 - 0.99	1	6	108	383	254	407	54	30			1022
1.0 - 1.49	13	198	800	3091	910	1297	157	37			1022
1.5 - 1.99		90	97	100	214	1009	1047	143			1022
2.0 - 2.49		13	41	88	210	1047	990	372			1022
2.5 - 2.99			3	15	23	114	585	330			1022
3.0 - 3.49					8	82	292	108			1022
3.5 - 3.99											0
4.0 - 4.49											0
4.5 - 4.99											0
5.0 - 5.49											0
5.5 - 5.99											0
TOTAL	28	291	691	1350	2647	5732	5777	2559	111	0	0

MEAN HS(M) = 3.19 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 13.1 NUMBER OF CASES = 11236

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-1.0	.	.	.	.	.	.	.	.	.	.	0
1.1-1.5	.	.	.	.	.	.	.	.	.	.	0
1.6-2.0	17	39	30	1	1	.	.	.	.	.	127
2.1-2.5	11	140	92	18	2	.	.	.	.	.	269
2.6-3.0	.	159	181	34	20	.	.	.	.	.	394
3.1-3.5	.	25	150	88	44	.	.	.	.	.	347
3.6-4.0	.	.	32	95	77	13	.	.	.	.	335
4.1-4.5	.	.	1	77	99	25	.	.	.	.	334
4.6-5.0	.	.	.	42	42	29	13	.	.	.	117
5.1-5.5	.	.	.	17	30	27	13	.	.	.	87
TOTAL	34	433	690	372	319	96	17	0	0	0	1159

MEAN HS(M) = 3.26 LARGEST HS(M) = 7.08 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 1159

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	5	3	.	.	.	.	.	.	.	.	8
0.5-1.0	3	6	.	.	.	.	.	.	.	.	9
1.1-1.5	5	8	.	.	.	.	.	.	.	.	13
1.6-2.0	.	.	.	.	.	.	.	.	.	.	0
2.1-2.5	.	.	.	.	.	.	.	.	.	.	0
2.6-3.0	.	.	.	.	.	.	.	.	.	.	0
3.1-3.5	.	.	.	.	.	.	.	.	.	.	0
3.6-4.0	.	.	.	.	.	.	.	.	.	.	0
4.1-4.5	.	.	.	.	.	.	.	.	.	.	0
4.6-5.0	.	.	.	.	.	.	.	.	.	.	0
5.1-5.5	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	23	0	0	0	0	0	0	0	0	24

MEAN HS(M) = 1.08 LARGEST HS(M) = 1.92 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 24

PHASE 3 ST. 73 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

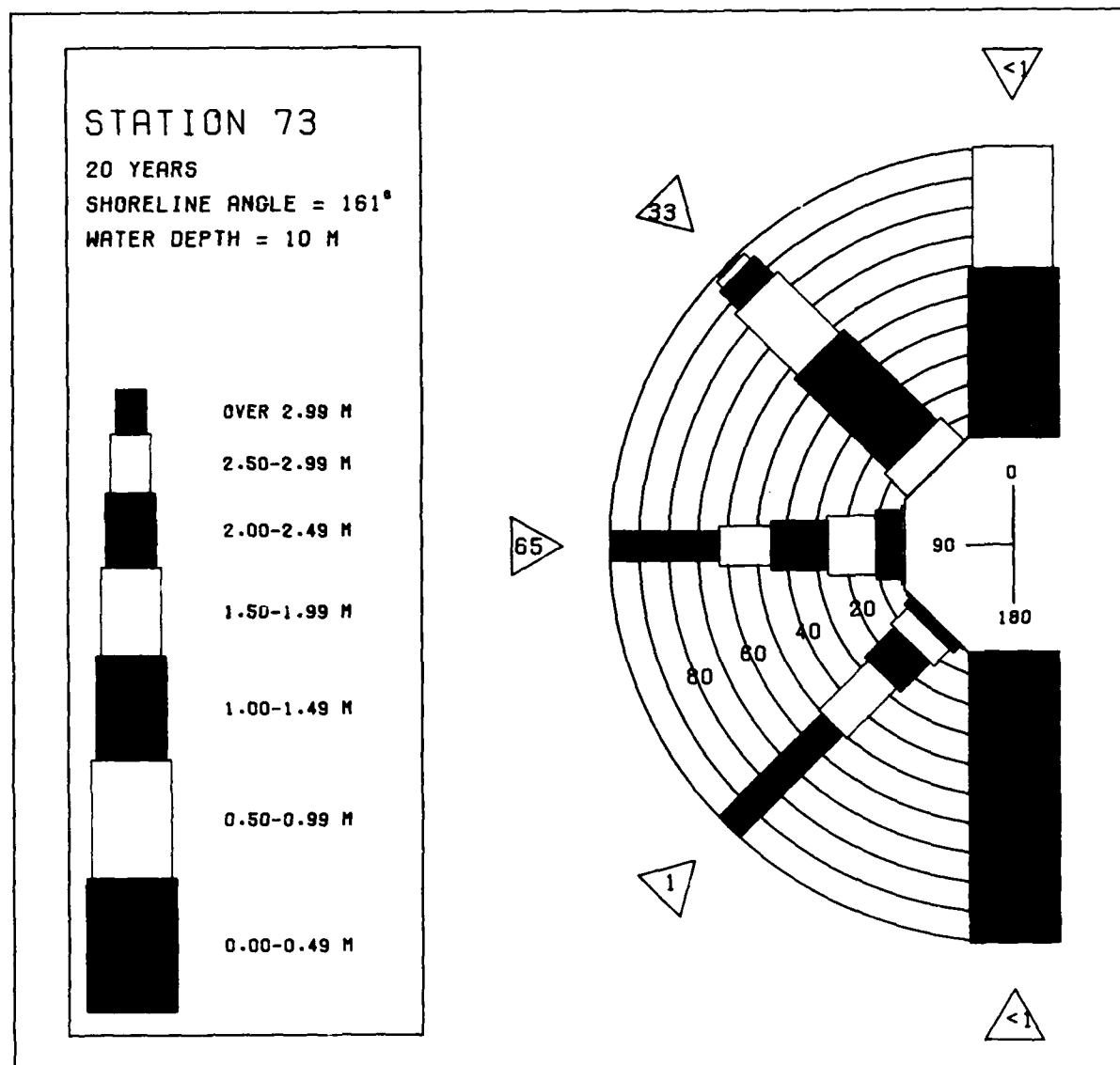
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0
0.5-1.0	0
1.1-1.5	0
1.6-2.0	0
2.1-2.5	0
2.6-3.0	0
3.1-3.5	0
3.6-4.0	0
4.1-4.5	0
4.6-5.0	0
5.1-5.5	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 73 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 40.43N/124.40W LAT. LON. END= 40.33N/124.35W
 SHORELINE ANGLE = 161.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.50-1.00	44	158	174	34	16	5	3	1	1	1	434
1.00-1.50	162	490	690	398	235	61	11	3	1	1	2050
1.50-2.00	41	232	331	694	593	220	45	4	1	1	2070
2.00-2.50	3	70	75	189	586	516	126	8	1	1	1574
2.50-3.00	..	37	53	51	265	651	210	14	3	1	1284
3.00-3.50	..	7	37	37	98	453	275	29	2	1	938
3.50-4.00	..	..	23	18	51	250	287	30	1	1	658
4.00-4.50	..	..	7	10	26	112	253	33	1	1	439
4.50-5.00	..	..	..	5	7	36	163	109	1	1	244
5.00+	..	..	..	1	4	23	110	33	1	1	247
TOTAL	254	1002	1393	1347	1881	2328	1483	259	7	0	58440

MEAN HS(M) = 2.36 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 73 (40.43N/ 124.40W TO 40.33N/ 124.35W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
MEAN	3.3	3.3	2.9	2.4	1.8	1.6	1.4	1.3	1.5	2.2	3.1	3.5

MEAN
1975 3.3
1976 3.3
1977 2.9
1978 2.4
1979 1.8
1980 1.6
1981 1.4
1982 1.3
1983 1.5
1984 2.2
1985 3.1
1986 3.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 73 (40.43N/ 124.40W TO 40.33N/ 124.35W)

	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
LARGEST HS	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5

20 YR. STATISTICS FOR PACIFIC STATION 73 (40.43N/ 124.40W TO 40.33N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN BREAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	77.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121200

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 40.33N/124.35W LAT. LON. END = 40.01N/124.35W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.5 - 0.99	.	.	.	.	.	.	.	.	.	.	1
1.0 - 1.49	1	32	34	.	.	.	.	.	.	.	67
1.5 - 1.99	17	34	63	1	1	1	.	.	.	.	117
2.0 - 2.49	10	104	100	34	20	13	.	.	.	.	271
2.5 - 2.99	.	102	148	61	46	1	.	.	.	.	368
3.0 - 3.49	.	25	167	87	77	20	.	.	.	.	385
3.5 - 3.99	.	.	83	58	116	30	1	.	.	.	278
4.0 - 4.49	.	.	37	25	35	5	.	.	.	.	180
4.5 - 4.99	.	.	1	13	20	4	15	.	.	.	93
5.0 - 5.49	.	.	.	5	7	3	3	.	.	.	60
TOTAL	28	298	633	284	382	156	39	0	0	0	

MEAN HS(M) = 3.16 LARGEST HS(M) = 7.09 MEAN TP(SEC) = 9.6 NUMBER OF CASES = 1077

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 40.33N/124.35W LAT. LON. END = 40.01N/124.35W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.5 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.0 - 1.49	5	1	.	.	.	.	.	.	.	.	0
1.5 - 1.99	0	1	.	.	.	.	.	.	.	.	0
2.0 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.5 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.0 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.5 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.0 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.5 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.0 - 5.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	11	11	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.58 LARGEST HS(M) = 2.85 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 15

PHASE 3 ST. 74 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 40.33N/124.35W LAT. LON. END = 40.01N/124.35W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 - 5.49	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 74 (40.33N/ 124.35W TO 40.01N/ 124.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1957	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1958	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1959	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1960	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1961	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1962	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1963	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1964	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1965	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1966	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1967	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1968	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1969	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1970	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1971	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1972	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1973	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1974	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1975	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 74 (40.33N/ 124.35W TO 40.01N/ 124.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1957	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1958	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1959	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1960	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1961	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1962	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1963	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1964	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1965	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1966	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1967	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1968	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1969	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1970	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1971	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1972	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1973	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1974	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5
1975	3.6	3.6	3.2	2.7	2.1	1.8	1.7	1.5	1.7	2.5	3.3	3.8	2.5

20 YR. STATISTICS FOR PACIFIC STATION 74 (40.33N/ 124.35W TO 40.01N/ 124.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METER)	2.5
MEAN PERIOD	(SEC)	10.0
MEAN DIRECTION	(DEGREE)	100
MEAN BAND	(BAND)	100
STANDARD DEVIATION OF MEAN	(METER)	1.0
LARGEST HS	(METER)	10.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	(YR,MO,DA,HR)	69121200

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER
0.0-0.49	3	.	.	.	.	.	.	.	.	.
0.50-0.99	5	3	5	.	.	.	.	.	.	.
1.00-1.49	32	32	10	.	.	.	.	.	.	.
1.50-1.99	63	107	37	1	1	.	.	.	.	.
2.00-2.49	13	104	51	3	6	.	.	.	.	.
2.50-2.99	.	95	39	1	.	.	.	.	.	.
3.00-3.49	.	20	29	5	.	.	.	.	.	.
3.50-3.99	.	1	.	1	.	.	.	.	.	.
4.00-4.49	.	.	.	.	.	.	.	.	.	.
4.50-4.99	.	.	.	.	.	.	.	.	.	.
5.00+	.	.	.	.	.	.	.	.	.	.
TOTAL	116	362	171	11	7	0	0	0	0	0

MEAN HS(M) = 2.63 LARGEST HS(M) = 4.32 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 397

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER
0.0-0.49	5	1	.	.	.	.	.	.	.	.
0.50-0.99	11	.	.	.	.	.	.	.	.	.
1.00-1.49	23	.	.	.	.	.	.	.	.	.
1.50-1.99	3	.	.	.	.	.	.	.	.	.
2.00-2.49	1	3	.	.	.	.	.	.	.	.
2.50-2.99	.	.	.	.	.	.	.	.	.	.
3.00-3.49	.	.	.	.	.	.	.	.	.	.
3.50-3.99	.	.	.	.	.	.	.	.	.	.
4.00-4.49	.	.	.	.	.	.	.	.	.	.
4.50-4.99	.	.	.	.	.	.	.	.	.	.
5.00+	.	.	.	.	.	.	.	.	.	.
TOTAL	45	4	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.60 LARGEST HS(M) = 3.18 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 31

PHASE 3 ST. 75 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 40.01N/124.35W LAT. LON. END= 40.16N/124.25W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

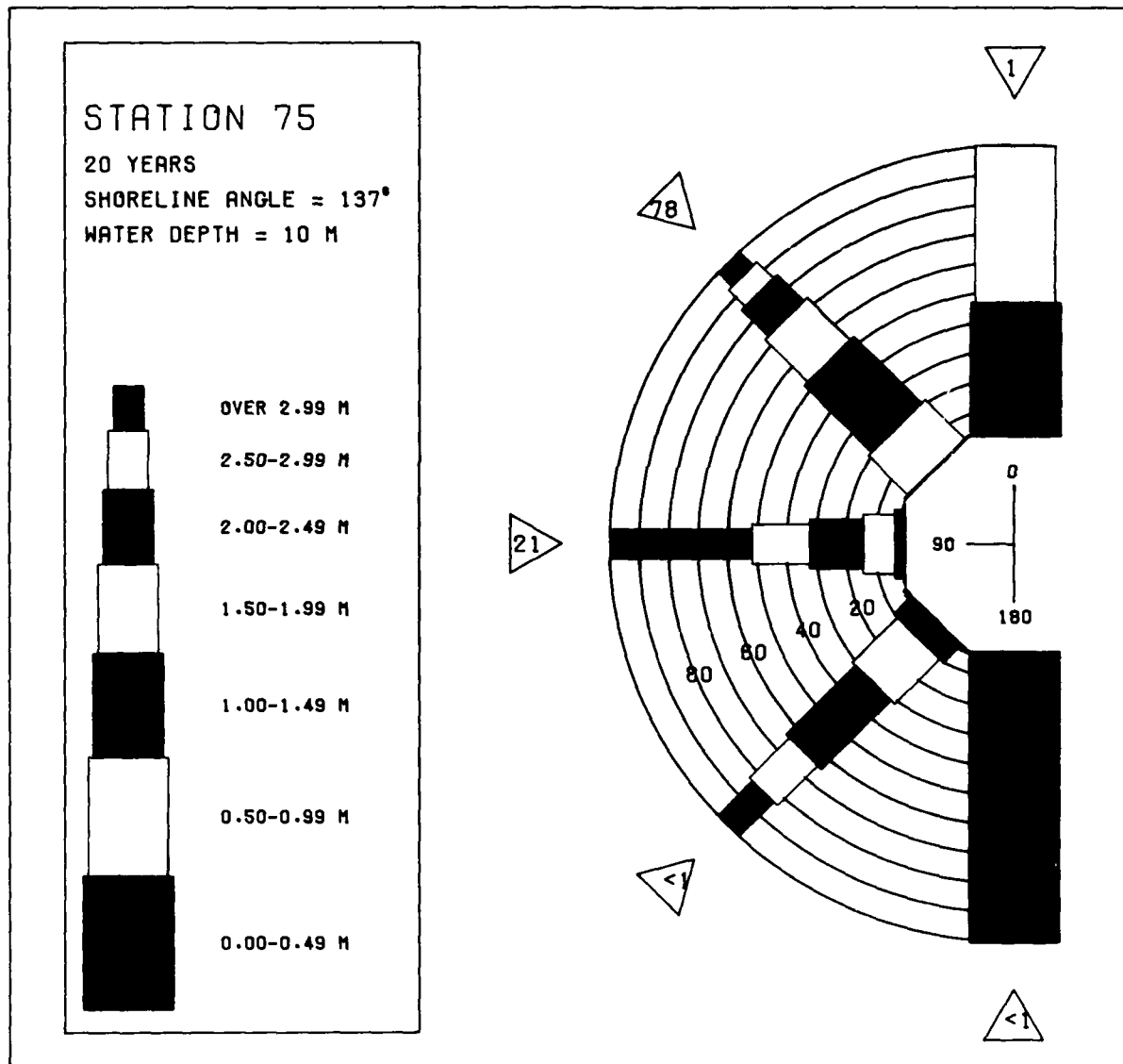
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER
0.0-0.49	18	.	.	.	.	.	.	.	.	.
0.50-0.99
1.00-1.49
1.50-1.99
2.00-2.49
2.50-2.99
3.00-3.49
3.50-3.99
4.00-4.49
4.50-4.99
5.00+
TOTAL	18	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.25 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 11

PHASE 3 ST. 75 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 40.01N/124.35W LAT. LONG. END = 40.16N/124.25W
 SHORELINE ANGLE = 137.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0-	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	97
0.5-	1.76	2.41	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
1.0-	7.23	4.41	6.06	1.76	6.06	1.76	1.76	1.76	1.76	1.76	1544
1.5-	2.41	3.01	6.06	1.76	6.06	1.76	1.76	1.76	1.76	1.76	1544
2.0-	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
2.5-	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
3.0-	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
3.5-	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
4.0-	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
4.5-	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
5.0+	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1544
TOTAL	339	1048	1555	1320	1843	2233	1380	236	3	0	58440

MEAN HS(M) = 1.93 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 75 (40.01N/ 124.35W TO 40.16N/ 124.25W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
1958	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958
1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959
1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960
1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961
1962	1962	1962	1962	1962	1962	1962	1962	1962	1962	1962	1962	1962	1962
1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963
1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964
1965	1965	1965	1965	1965	1965	1965	1965	1965	1965	1965	1965	1965	1965
1966	1966	1966	1966	1966	1966	1966	1966	1966	1966	1966	1966	1966	1966
1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967
1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968
1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969
1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970
1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971
1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972
1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973
1974	1974	1974	1974	1974	1974	1974	1974	1974	1974	1974	1974	1974	1974
1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975
MEAN	2.9	2.9	2.4	1.9	1.4	1.2	1.1	1.0	1.2	1.8	2.5	3.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 75 (40.01N/ 124.35W TO 40.16N/ 124.25W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956	1956
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
1958	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958	1958
1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959	1959
1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960
1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961
1962	1962	1962	1962	1962	1962	1962	1962	1962	1962	1962	1962	1962
1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963	1963
1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964	1964
1965	1965	1965	1965	1965	1965	1965	1965	1965	1965	1965	1965	1965
1966	1966	1966	1966	1966	1966	1966	1966	1966	1966	1966	1966	1966
1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967
1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968	1968
1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969	1969
1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970	1970
1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971	1971
1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972
1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973	1973
1974	1974	1974	1974	1974	1974	1974	1974	1974	1974	1974	1974	1974
1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975

20 YR. STATISTICS FOR PACIFIC STATION 75 (40.01N/ 124.35W TO 40.16N/ 124.25W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.9
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.0
LARGEST WAVE HS	(METERS)	1.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	120.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0.0 - 14.9
 LAT. LON. START = 40.16N/124.25W LAT. LON. END = 40.10N/124.13W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	242	0	0	0	0	0	0	0	0	0	242
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	242	0	0	0	0	0	0	0	0	0	242

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.37 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 142

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 40.16N/124.25W LAT. LON. END = 40.10N/124.13W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1572	1020	83	0	0	0	0	0	0	0	2585
0.50 - 0.99	1572	1020	83	0	0	0	0	0	0	0	2585
1.00 - 1.49	1572	1020	83	0	0	0	0	0	0	0	2585
1.50 - 1.99	1572	1020	83	0	0	0	0	0	0	0	2585
2.00 - 2.49	1572	1020	83	0	0	0	0	0	0	0	2585
2.50 - 2.99	1572	1020	83	0	0	0	0	0	0	0	2585
3.00 - 3.49	1572	1020	83	0	0	0	0	0	0	0	2585
3.50 - 3.99	1572	1020	83	0	0	0	0	0	0	0	2585
4.00 - 4.49	1572	1020	83	0	0	0	0	0	0	0	2585
4.50 - 4.99	1572	1020	83	0	0	0	0	0	0	0	2585
5.00 +	1572	1020	83	0	0	0	0	0	0	0	2585
TOTAL	3461	8083	1229	0	0	0	0	0	0	0	7473

MEAN HS(M) = 0.79 LARGEST HS(M) = 2.98 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 7473

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 40.16N/124.25W LAT. LON. END = 40.10N/124.13W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	11	544	8326	5333	2523	4577	92	27	3	0	544
0.50 - 0.99	11	544	8326	5333	2523	4577	92	27	3	0	544
1.00 - 1.49	11	544	8326	5333	2523	4577	92	27	3	0	544
1.50 - 1.99	11	544	8326	5333	2523	4577	92	27	3	0	544
2.00 - 2.49	11	544	8326	5333	2523	4577	92	27	3	0	544
2.50 - 2.99	11	544	8326	5333	2523	4577	92	27	3	0	544
3.00 - 3.49	11	544	8326	5333	2523	4577	92	27	3	0	544
3.50 - 3.99	11	544	8326	5333	2523	4577	92	27	3	0	544
4.00 - 4.49	11	544	8326	5333	2523	4577	92	27	3	0	544
4.50 - 4.99	11	544	8326	5333	2523	4577	92	27	3	0	544
5.00 +	11	544	8326	5333	2523	4577	92	27	3	0	544
TOTAL	176	2175	12910	12193	17148	20762	12946	2284	56	0	47156

MEAN HS(M) = 1.69 LARGEST HS(M) = 6.68 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 47156

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 40.16N/124.25W LAT. LON. END = 40.10N/124.13W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METER.)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	6	13	0	0	0	0	0	0	0	1
0.50 - 0.99	1	6	13	0	0	0	0	0	0	0	1
1.00 - 1.49	1	6	13	0	0	0	0	0	0	0	1
1.50 - 1.99	1	6	13	0	0	0	0	0	0	0	1
2.00 - 2.49	1	6	13	0	0	0	0	0	0	0	1
2.50 - 2.99	1	6	13	0	0	0	0	0	0	0	1
3.00 - 3.49	1	6	13	0	0	0	0	0	0	0	1
3.50 - 3.99	1	6	13	0	0	0	0	0	0	0	1
4.00 - 4.49	1	6	13	0	0	0	0	0	0	0	1
4.50 - 4.99	1	6	13	0	0	0	0	0	0	0	1
5.00 +	1	6	13	0	0	0	0	0	0	0	1
TOTAL	219	1403	1587	835	602	413	196	5	1	0	3130

MEAN HS(M) = 3.15 LARGEST HS(M) = 6.57 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 3130

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	300	333	32	0	0	0	0	0	0	0	394

MEAN HS(M) = 2.28 LARGEST HS(M) = 4.05 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 394

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	100	0	0	0	0	0	0	0	0	0	60

MEAN HS(M) = 0.68 LARGEST HS(M) = 2.30 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 60

PHASE 3 ST. 76 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 40.16N/124.25W LAT. LON. END= 40.10N/124.13W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 40.10N/124.13W LAT. LONG. END= 40.01N/124.08W
 SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 40.10N/124.13W LAT. LONG. END= 40.01N/124.08W
 SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	1854	333	0	0	0	0	0	0	0	0	2187
0.5-0.99	604	491	0	0	0	0	0	0	0	0	1095
1.0-1.49	11	5	0	0	0	0	0	0	0	0	16
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2469	829	0	0	0	0	0	0	0	0	3298

MEAN HS(M) = 0.43 LARGEST HS(M) = 1.31 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1929

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 40.10N/124.13W LAT. LONG. END= 40.01N/124.08W
 SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	32	242	99	17	11	6	3	0	0	0	410
0.5-0.99	164	3247	3963	1144	580	148	15	0	0	0	9269
1.0-1.49	169	1870	7654	5898	3459	942	15	0	0	0	20147
1.5-1.99	23	482	1640	4238	6584	2703	610	20	0	0	16300
2.0-2.49	0	265	345	903	4180	5256	978	37	0	0	11964
2.5-2.99	0	61	150	275	1688	4328	1603	109	0	0	8714
3.0-3.49	0	10	61	130	544	3355	2019	169	0	0	6288
3.5-3.99	0	0	29	20	186	1700	2279	193	0	0	4407
4.0-4.99	0	0	1	5	87	614	1762	224	0	0	2623
5.00+	0	0	0	0	0	183	999	294	0	0	1476
TOTAL	388	6177	13942	12630	17319	19776	10940	1749	0	0	12533

MEAN HS(M) = 2.10 LARGEST HS(M) = 6.94 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 48479

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 40.10N/124.13W LAT. LONG. END= 40.01N/124.08W
 SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	10	295	30	53	30	20	23	3	0	0	353
1.0-1.49	20	1097	1093	1023	207	249	133	15	0	0	3030
1.5-1.99	20	1160	1599	1453	374	749	347	47	0	0	3017
2.0-2.49	0	1138	198	1933	268	799	619	82	0	0	3072
2.5-2.99	0	53	177	119	246	417	335	102	0	0	1455
3.0-3.49	0	0	10	102	140	109	439	53	0	0	1116
3.5-3.99	0	0	1	73	77	188	340	65	0	0	553
4.0-4.99	0	0	0	1	47	155	456	222	0	0	903
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	73	584	1170	915	1649	3512	3342	711	63	0	7048

MEAN HS(M) = 3.20 LARGEST HS(M) = 7.54 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 7048

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
 SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	
0.0-0.49	6	5	3	.	.	.	.	.	.	.	9
0.5-0.99	18	5	.	.	.	.	.	.	.	.	33
1.0-1.49	11	27	5	.	.	.	.	.	.	.	53
1.5-1.99	20	68	15	.	.	.	.	.	.	.	103
2.0-2.49	3	66	75	36	.	.	.	.	.	.	167
2.5-2.99	.	11	102	35	5	.	.	.	.	.	225
3.0-3.49	.	83	138	53	32	1	.	.	.	.	307
3.5-3.99	.	11	66	47	46	1	.	.	.	.	171
4.0-4.99	.	.	17	23	37	1	.	.	.	.	78
5.0-5.99	.	.	6	4	10	1	.	.	.	.	29
6.0-6.99	.	.	.	.	18	24	0	0	0	0	42
TOTAL	68	371	427	165	172	24	0	0	0	0	730

MEAN HS(M) = 3.01 LARGEST HS(M) = 6.44 MEAN TP(SEC) = 8.6 NUMBER OF CASES = 730

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
 SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	
0.0-0.49	9	1	6	0	0	0	0	0	0	0	34
0.5-0.99	50	.	.	.	.	.	.	.	.	.	50
1.0-1.49	15	.	.	.	.	.	.	.	.	.	15
1.5-1.99	10	.	.	.	.	.	.	.	.	.	10
2.0-2.49	8	.	.	.	.	.	.	.	.	.	8
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.99	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.99	.	.	.	.	.	.	.	.	.	.	0
6.0-6.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	90	1	6	0	0	0	0	0	0	0	59

MEAN HS(M) = 0.88 LARGEST HS(M) = 2.23 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 59

PHASE 3 ST. 77 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 40.10N/124.13W LAT. LON. END= 40.01N/124.08W
 SHORELINE ANGLE = 153.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	
0.0-0.49	77	.	.	.	.	.	.	.	.	.	77
0.5-0.99	.	.	.	.	.	.	.	.	.	.	0
1.0-1.49	.	.	.	.	.	.	.	.	.	.	0
1.5-1.99	.	.	.	.	.	.	.	.	.	.	0
2.0-2.49	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.99	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.99	.	.	.	.	.	.	.	.	.	.	0
6.0-6.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	77	0	0	0	0	0	0	0	0	0	45

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.33 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 45

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
 SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49	1	1	5	1	1	1	1	1	1	1	14
0.99	18	3	8	1	1	1	1	1	1	1	30
1.49	44	30	37	1	1	1	1	1	1	1	111
1.99	53	94	35	1	1	1	1	1	1	1	140
2.49	8	11	32	1	1	1	1	1	1	1	50
2.99	1	6	11	1	1	1	1	1	1	1	20
3.49	1	1	1	1	1	1	1	1	1	1	10
3.99	1	1	1	1	1	1	1	1	1	1	10
4.49	1	1	1	1	1	1	1	1	1	1	10
4.99	1	1	1	1	1	1	1	1	1	1	10
5.49	1	1	1	1	1	1	1	1	1	1	10
5.99	1	1	1	1	1	1	1	1	1	1	10
TOTAL	128	311	128	2	2	0	0	0	0	0	342

MEAN HS(M) = 2.46 LARGEST HS(M) = 3.83 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 342

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
 SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49	15	1	1	1	1	1	1	1	1	1	15
0.99	1	1	1	1	1	1	1	1	1	1	10
1.49	1	1	1	1	1	1	1	1	1	1	10
1.99	1	1	1	1	1	1	1	1	1	1	10
2.49	1	1	1	1	1	1	1	1	1	1	10
2.99	1	1	1	1	1	1	1	1	1	1	10
3.49	1	1	1	1	1	1	1	1	1	1	10
3.99	1	1	1	1	1	1	1	1	1	1	10
4.49	1	1	1	1	1	1	1	1	1	1	10
4.99	1	1	1	1	1	1	1	1	1	1	10
5.49	1	1	1	1	1	1	1	1	1	1	10
5.99	1	1	1	1	1	1	1	1	1	1	10
TOTAL	15	0	0	0	0	0	0	0	0	0	9

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.16 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 9

PHASE 3 ST. 78 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
 SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

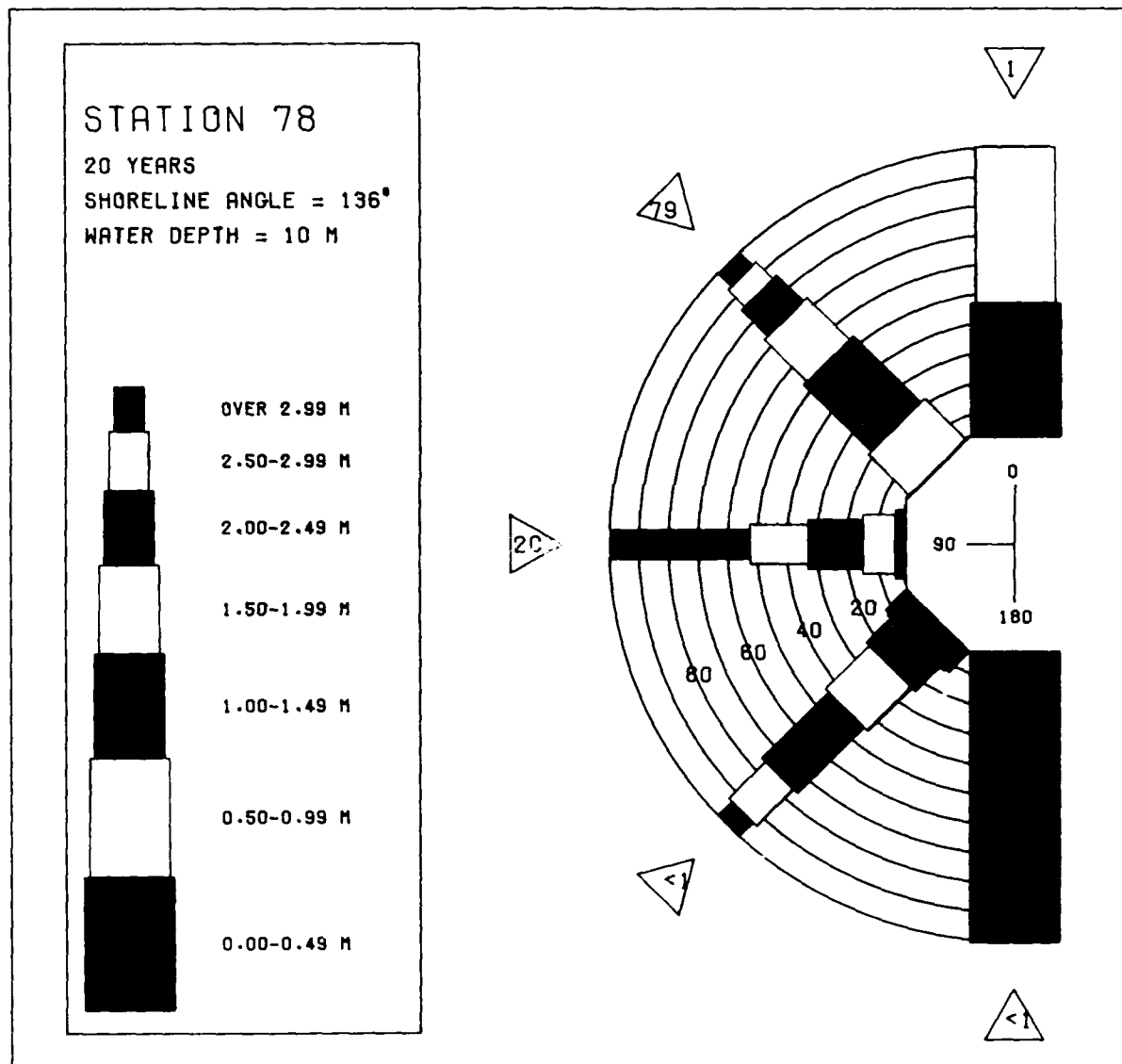
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.49	1	1	1	1	1	1	1	1	1	1	10
0.99	1	1	1	1	1	1	1	1	1	1	10
1.49	1	1	1	1	1	1	1	1	1	1	10
1.99	1	1	1	1	1	1	1	1	1	1	10
2.49	1	1	1	1	1	1	1	1	1	1	10
2.99	1	1	1	1	1	1	1	1	1	1	10
3.49	1	1	1	1	1	1	1	1	1	1	10
3.99	1	1	1	1	1	1	1	1	1	1	10
4.49	1	1	1	1	1	1	1	1	1	1	10
4.99	1	1	1	1	1	1	1	1	1	1	10
5.49	1	1	1	1	1	1	1	1	1	1	10
5.99	1	1	1	1	1	1	1	1	1	1	10
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 78 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 40.01N/124.08W LAT. LON. END= 39.91N/123.91W
 SHORELINE ANGLE = 136.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-22.3- LONGER	TOTAL
0.0-0.49	61	28	15	2	2	2	2	2	2	2	108
0.50-0.99	177	459	644	211	110	22	2	2	2	2	1627
1.00-1.49	69	287	582	746	567	203	41	1	2	2	2596
1.50-1.99	22	114	101	193	635	614	120	6	2	2	1815
2.00-2.49	1	55	53	55	226	649	261	20	2	2	1354
2.50-2.99	1	3	34	40	90	407	336	35	2	2	1024
3.00-3.49	1	1	1	1	1	189	255	40	2	2	640
3.50-3.99	1	1	1	1	1	74	179	42	2	2	386
4.00-4.49	1	1	1	1	1	39	86	35	2	2	209
4.50-4.99	1	1	1	1	1	14	45	24	2	2	105
5.00+	1	1	1	1	1	16	16	2	2	2	81
TOTAL	339	1052	1562	1319	1843	2227	1375	234	4	0	58440

MEAN HS(M) = 1.90 LARGEST HS(M) = 6.99 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 78 (40.01N/ 124.08W TO 39.91N/ 123.91W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1957	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1958	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1959	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1960	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1961	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1962	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1963	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1964	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1965	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1966	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1967	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1968	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1969	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1970	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1971	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1972	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1973	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1974	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
1975	3.0	2.5	2.0	1.7	1.5	1.4	0.9	1.0	1.0	1.4	1.9	2.2	1.7
MEAN	2.9	2.8	2.4	1.9	1.4	1.2	1.0	1.0	1.1	1.7	2.4	3.0	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 78 (40.01N/ 124.08W TO 39.91N/ 123.91W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1957	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1958	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1959	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1960	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1961	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1962	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1963	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1964	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1965	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1966	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1967	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1968	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1969	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1970	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1971	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1972	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1973	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1974	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
1975	5.0	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3

20 YR. STATISTICS FOR PACIFIC STATION 78 (40.01N/ 124.08W TO 39.91N/ 123.91W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.9
MEAN PEAK WAVE PERIOD	(SECONDS)	10.9
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	72.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121209

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 39.91N/123.91W LAT. LON. END = 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	148	.	.	.	.	.	.	.	.	.	148
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	148	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.12 LARGEST HS(M) = 0.39 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 87

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 39.91N/123.91W LAT. LON. END = 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	273	80	213	.	.	.	.	.	.	.	371
0.50 - 0.99	165	287	331	.	.	.	.	.	.	.	475
1.00 - 1.49	83	249	75	.	.	.	.	.	.	.	367
1.50 - 1.99	85	677	104	.	.	.	.	.	.	.	851
2.00 - 2.49	.	5	.	.	.	.	.	.	.	.	5
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2852	6246	628	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.02 LARGEST HS(M) = 2.88 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 5689

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 39.91N/123.91W LAT. LON. END = 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	51	100	20	13	6	3	3	.	.	196
0.50 - 0.99	3	1007	4842	1521	855	181	10	17	5	.	8441
1.00 - 1.49	22	826	6498	7178	5248	1435	316	20	.	.	21543
1.50 - 1.99	32	376	1383	2635	7094	5066	1004	58	8	.	17356
2.00 - 2.49	5	338	367	627	2857	6913	2156	142	29	.	13434
2.50 - 2.99	.	148	246	285	1028	4510	2907	306	6	.	9436
3.00 - 3.49	.	23	105	82	367	2233	2943	347	8	.	6109
3.50 - 3.99	.	.	37	17	179	930	2094	376	.	.	3633
4.00 - 4.49	.	.	3	10	56	362	1146	355	.	.	1932
4.50 - 4.99	.	.	.	.	6	88	508	330	.	.	932
5.00 +	.	.	.	.	.	29	287	376	.	.	672
TOTAL	62	2769	13282	12375	17703	21753	13374	2330	56	0	0

MEAN HS(M) = 2.03 LARGEST HS(M) = 7.20 MEAN TP(SEC) = 11.5 NUMBER OF CASES = 48938

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 39.91N/123.91W LAT. LON. END = 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	15	.	.	.	.	.	.	.	0
0.50 - 0.99	.	6	159	1	3	.	.	.	.	.	21
1.00 - 1.49	13	161	119	27	59	17	6	1	.	.	240
1.50 - 1.99	10	163	140	25	129	47	20	3	.	.	421
2.00 - 2.49	17	301	248	160	115	231	111	6	.	.	768
2.50 - 2.99	.	128	208	130	148	136	89	1	.	.	1048
3.00 - 3.49	.	20	105	143	144	133	83	18	.	.	893
3.50 - 3.99	.	.	32	56	75	133	163	11	.	.	589
4.00 - 4.49	.	.	.	32	75	133	163	11	.	.	589
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	100	935	1406	865	961	942	611	63	4	0	3462

MEAN HS(M) = 3.27 LARGEST HS(M) = 6.86 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 3462

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 39.91N/123.91W LAT. LON. END = 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	3	1	8	1	1	1	1	1	1	1	4
0.50-1.00	5	5	5	1	1	1	1	1	1	1	15
1.00-1.49	2	3	3	1	1	1	1	1	1	1	15
1.50-2.00	2	3	3	1	1	1	1	1	1	1	15
2.00-2.49	3	3	3	1	1	1	1	1	1	1	15
2.50-3.00	3	3	3	1	1	1	1	1	1	1	15
3.00-3.49	3	3	3	1	1	1	1	1	1	1	15
3.50-4.00	3	3	3	1	1	1	1	1	1	1	15
4.00-4.49	3	3	3	1	1	1	1	1	1	1	15
4.50-5.00	3	3	3	1	1	1	1	1	1	1	15
5.00+	3	3	3	1	1	1	1	1	1	1	15
TOTAL	69	203	116	4	3	2	0	0	0	0	239

MEAN HS(M) = 2.41 LARGEST HS(M) = 5.13 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 239

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 39.91N/123.91W LAT. LON. END = 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	6	0	0	0	0	0	0	0	0	0	6
0.50-1.00	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-2.00	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-3.00	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-4.00	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-5.00	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	0	0	0	0	0	0	0	0	0	6

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.09 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 4

PHASE 3 ST. 79 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 39.91N/123.91W LAT. LON. END = 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

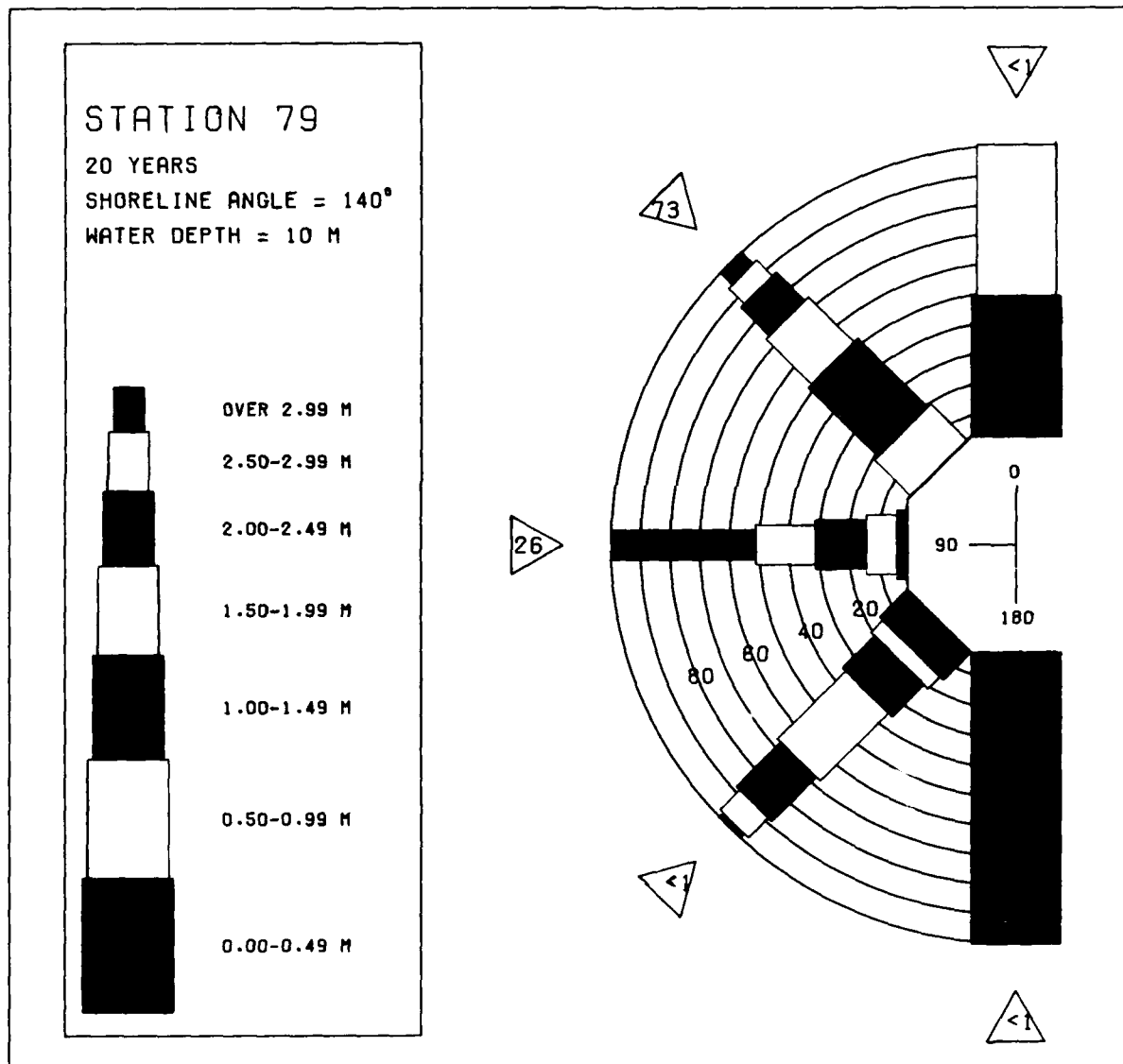
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-1.00	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-2.00	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-3.00	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-4.00	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-5.00	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 79 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 39.91N/123.91W LAT. LON. END= 39.83N/123.86W
 SHORELINE ANGLE = 140.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0-	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	70
0.5-	43	14	10	22	1	18	1	1	..	..	1319
1.0-	166	389	507	152	85	143	31	1	..	..	2533
1.5-	87	338	689	718	525	508	101	1	..	..	1869
2.0-	21	125	128	266	715	701	218	14	2	..	1441
2.5-	4	80	55	69	298	474	301	31	..	..	1066
3.0-	..	47	54	45	114	235	303	35	..	..	723
3.5-	..	18	54	36	51	103	218	39	..	..	452
4.0-	..	..	30	22	38	48	121	36	..	..	250
4.5-	..	..	10	15	20	18	59	34	..	..	129
5.0+	..	..	3	5	7	16	42	38	..	..	105
TOTAL	321	1013	1540	1322	1864	2265	1395	235	2	0	58440

MEAN HS(M) = 2.00 LARGEST HS(M) = 7.20 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MONTH

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 79 (39.91N/ 123.91W TO 39.83N/ 123.86W)

MONTH

20 YR. STATISTICS FOR PACIFIC STATION 79 (39.91N/ 123.91W TO 39.83N/ 123.86W)

MEAN	SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN	PERIOD	(SECONDS)	16.9
MEAN	PEAK WAVE PERIOD	(SECONDS)	18.7
MOST FREQUENT	30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60
STANDARD DEVIATION OF WAVE HS		(METERS)	1.0
LARGEST WAVE HS		(METERS)	2.2
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS		(DEGREES)	153
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		(DATE TIME)	69121209

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49											285
0.50 - 0.99	280	119									777
1.00 - 1.49	10	3									13
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	948	127	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.61 LARGEST HS(M) = 1.17 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 630

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	5	12	27	3	6	11	3				76
0.50 - 0.99	441	1640	1545	256	169	35	11				4097
1.00 - 1.49	687	3519	6947	2796	1288	183	1				15421
1.50 - 1.99	176	1552	3600	5142	3624	521	10				14630
2.00 - 2.49	11	539	646	1644	4618	2077	23				9558
2.50 - 2.99		208	213	362	2156	3204	18				6161
3.00 - 3.49		15	71	177	585	2590	25				3463
3.50 - 3.99		3	20	39	148	1384	15				1609
4.00 - 4.49			1	8	49	586	80				724
4.50 - 4.99					13	148	51				212
5.00 +						27	20				47
TOTAL	1320	7508	13070	10427	12650	10761	254	8	0	0	0

MEAN HS(M) = 1.93 LARGEST HS(M) = 6.17 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 32745

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49											1
0.50 - 0.99											33
1.00 - 1.49											282
1.50 - 1.99											2820
2.00 - 2.49											5409
2.50 - 2.99											6307
3.00 - 3.49											6106
3.50 - 3.99											425
4.00 - 4.49											307
4.50 - 4.99											340
5.00 +											0
TOTAL	20	476	1910	2842	6397	13027	14291	2485	65	0	0

MEAN HS(M) = 3.16 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 12.8 NUMBER OF CASES = 24286

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LONG. START = 39.83N/123.86W LAT. LONG. END = 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	1	1	.	.	.	.	.	.	.	1
1.00 - 1.49	13	27	35	.	.	.	.	.	.	.	116
1.50 - 1.99	5	68	75	22	11	1	.	.	.	.	182
2.00 - 2.49	.	61	118	35	30	.	.	.	.	.	248
2.50 - 2.99	.	22	133	68	44	1	.	.	.	.	268
3.00 - 3.49	.	3	50	46	75	13	.	.	.	.	197
3.50 - 3.99	.	.	23	18	68	6	.	.	.	.	115
4.00 - 4.49	.	.	3	13	32	10	.	.	.	.	58
4.50 - 4.99	.	.	.	1	5	18	.	.	.	.	24
5.00 +	.	.	.	.	.	.	.	.	.	.	.
TOTAL	24	250	451	207	265	49	1	0	0	0	741

MEAN HS(M) = 3.09 LARGEST HS(M) = 5.83 MEAN TP(SEC) = 9.3 NUMBER OF CASES = 741

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LONG. START = 39.83N/123.86W LAT. LONG. END = 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	15	1	.	.	.	.	.	.	.	.	16
0.50 - 0.99	8	.	.	.	.	.	.	.	.	.	9
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	23	2	0	0	0	0	0	0	0	0	16

MEAN HS(M) = 0.38 LARGEST HS(M) = 0.80 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 16

PHASE 3 ST. 80 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LONG. START = 39.83N/123.86W LAT. LONG. END = 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

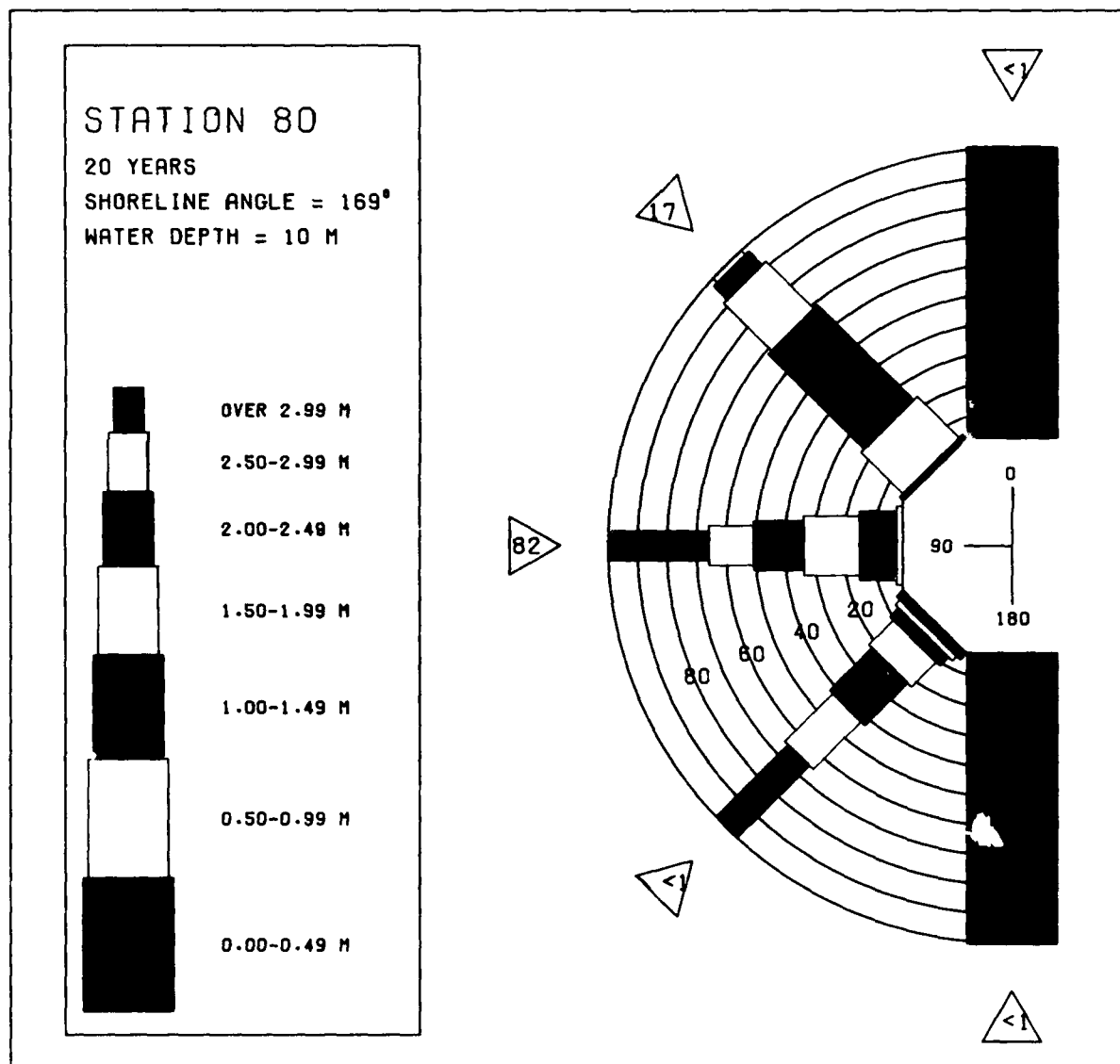
HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 80 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 39.83N/123.86W LAT. LON. END= 39.71N/123.85W
 SHORELINE ANGLE = 169.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)						TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	110	181	167	32	21	7	1	1	.	.	36
0.5-0.99	71	136	76	33	53	17	43	11	.	.	520
1.0-1.49	19	169	415	600	14	52	90	11	.	.	182
1.5-1.99	2	357	86	218	60	44	168	11	.	.	517
2.0-2.49	.	.	49	279	34	62	240	22	.	.	119
2.5-2.99	.	.	35	42	13	50	269	22	.	.	59
3.0-3.49	.	.	16	16	8	108	193	12	.	.	206
3.5-3.99	.	.	.	4	2	26	192	12	.	.	56
4.0-4.49	.	.	.	.	.	.	.	.	.	.	76
4.5-4.99	.	.	.	.	.	.	.	.	.	.	92
5.0-5.49	.	.	.	.	.	.	.	.	.	.	345
TOTAL	232	834	1538	1344	1926	2381	1452	1246	2	0	58440
MEAN HS(M) = 2.44	LARGEST HS(M) = 7.68			MEAN TP(SEC) = 11.1			TOTAL CASES =			58440	

MEAN HS(M) = 2.44 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.1 TOTAL CASES = 58440



WIS STATION 80 (39.83N/ 123.86W TO 39.71N/ 123.85W)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
MEAN	3.5	3.5	3.0	2.5	1.9	1.6	1.4	1.3	1.5	2.3	3.1	3.6

WIS STATION 80 (39.83N/ 123.86W TO 39.71N/ 123.85W)

[illegible]

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 2.4
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.4
LARGEST WAVE HS . . . . . (METERS) 7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . . . 6912120

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PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49												0
0.5-0.99												0
1.0-1.49												0
1.5-1.99												0
2.0-2.49												0
2.5-2.99												0
3.0-3.49												0
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
5.5-5.99												0
6.0-6.49												0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49												208
0.5-0.99	203	5										208
1.0-1.49	730	181										911
1.5-1.99	968	669										1637
2.0-2.49	162	201										363
2.5-2.99	1	11										12
3.0-3.49												0
3.5-3.99												0
4.0-4.49												0
4.5-4.99												0
5.0-5.49												0
5.5-5.99												0
6.0-6.49												0
TOTAL	2064	1067	0	0	0	0	0	0	0	0	0	3131

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.33 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 1833

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49												50
0.5-0.99												3035
1.0-1.49	35	1113	1409	260	154	51	13					14636
1.5-1.99	284	3247	6408	2813	1560	304	17					16478
2.0-2.49	241	1972	3844	5277	4159	953	27					10815
2.5-2.99	25	775	768	1733	4825	2578	111					7402
3.0-3.49		272	239	419	2311	3898	263					4241
3.5-3.99		29	95	203	648	2908	354					2413
4.0-4.49		5	27	54	188	1699	438					1275
4.5-4.99				15	66	701	492					511
5.0-5.49				1	11	212	287					174
5.5-5.99						32	142					
6.0-6.49							2144					
TOTAL	585	7426	12822	10778	13922	13342	2144	11	0	0		35683

MEAN HS(M) = 2.06 LARGEST HS(M) = 6.42 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 35683

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49												1
0.5-0.99												207
1.0-1.49												2009
1.5-1.99												4330
2.0-2.49												2190
2.5-2.99												2009
3.0-3.49												2009
3.5-3.99												2009
4.0-4.49												2009
4.5-4.99												2009
5.0-5.49												2009
5.5-5.99												2009
6.0-6.49												2009
TOTAL	19	430	1545	2169	4902	10308	12351	2473	65	0		20046

MEAN HS(M) = 3.26 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 12.9 NUMBER OF CASES = 20046

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	.	.	.	.	.	.	.	.	.	.	0
1.00 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.49	3	27	6	.	.	.	.	.	.	.	36
2.00 - 1.99	17	44	39	.	.	.	.	.	.	.	100
2.50 - 2.49	8	82	80	6	3	1	.	.	.	.	180
3.00 - 2.99	.	39	121	49	22	.	.	.	.	.	277
3.50 - 3.49	.	8	148	71	42	.	.	.	.	.	300
4.00 - 3.99	.	.	90	61	75	10	.	.	.	.	244
4.50 - 4.49	.	.	27	32	97	18	1	.	.	.	175
5.00 - 4.99	.	.	6	20	39	15	.	.	.	.	80
5.00 +	.	.	.	1	17	22	.	.	.	.	40
TOTAL	28	285	517	240	295	66	1	0	0	0	848

MEAN HS(M) = 3.23 LARGEST HS(M) = 6.23 MEAN TP(SEC) = 9.3 NUMBER OF CASES = 848

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	5	.	.	.	.	.	.	.	.	.	5
1.00 - 0.99	10	.	.	.	.	.	.	.	.	.	10
1.50 - 1.49	3	.	.	.	.	.	.	.	.	.	3
2.00 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.49	.	.	.	.	.	.	.	.	.	.	0
3.00 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.49	.	.	.	.	.	.	.	.	.	.	0
4.00 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.49	.	.	.	.	.	.	.	.	.	.	0
5.00 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	18	0	0	0	0	0	0	0	0	0	0
TOTAL	18	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.00 LARGEST HS(M) = 1.65 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 11

PHASE 3 ST. 81 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 39.71N/123.85W LAT. LON. END= 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

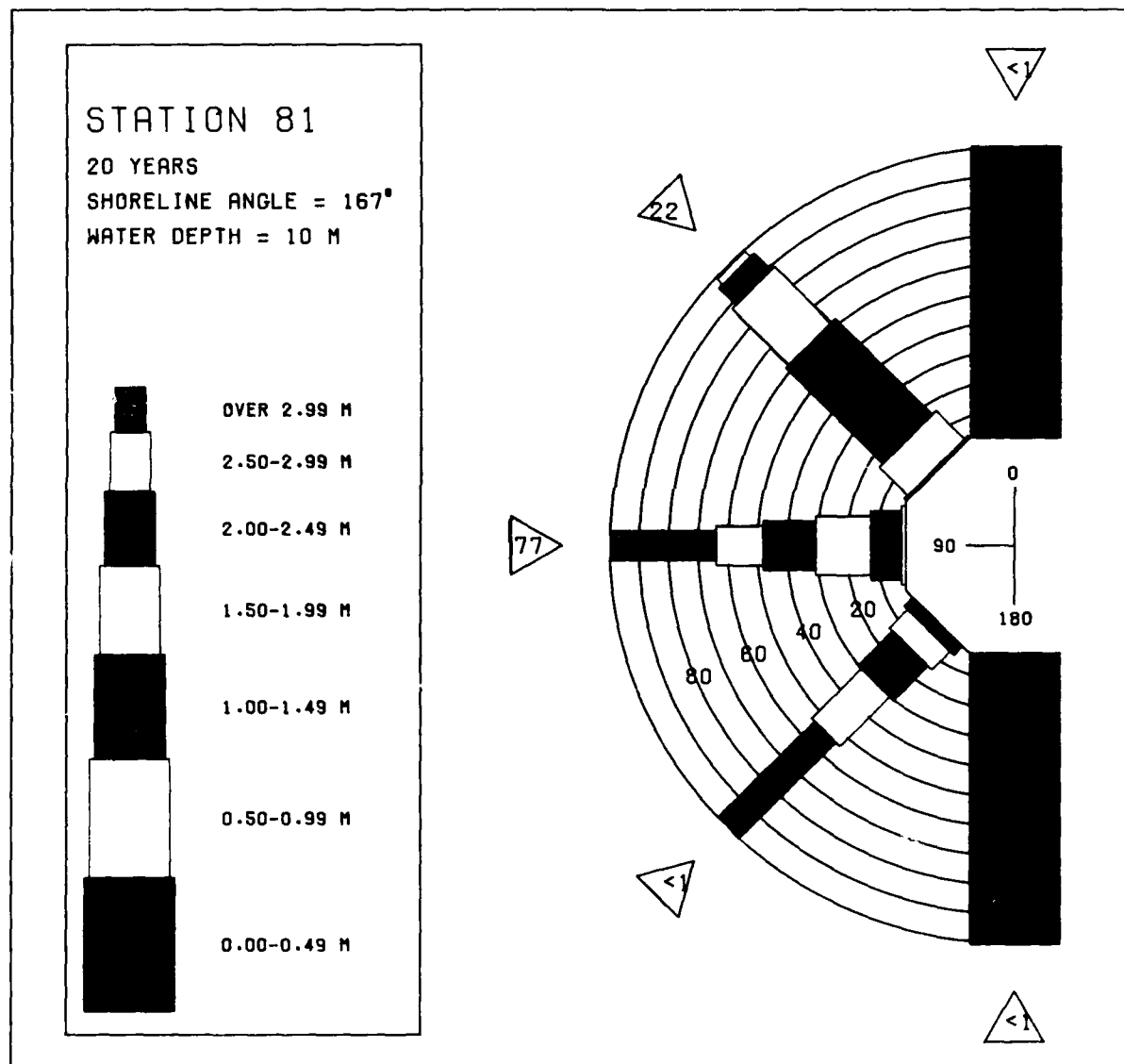
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	3	.	.	.	.	.	.	.	.	.	3
1.00 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.49	.	.	.	.	.	.	.	.	.	.	0
2.00 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.49	.	.	.	.	.	.	.	.	.	.	0
3.00 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.49	.	.	.	.	.	.	.	.	.	.	0
4.00 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.49	.	.	.	.	.	.	.	.	.	.	0
5.00 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	3	0	0	0	0	0	0	0	0	0	0
TOTAL	3	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 2

PHASE 3 ST. 81 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 39.71N/123.85W LAT. LON. END = 39.60N/123.80W
 SHORELINE ANGLE = 167.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.1	6.1-8.1	8.1-9.6	9.6-10.5	10.5-10.6	10.6-11.7	11.7-13.3	13.3-15.3	15.3-18.1	18.1-22.2	22.2-22.3	22.3-22.3	22.3-22.3	TOTAL
0.00-0.49	127	133	140	29	18	49	1	1	1	1	1	1	1	25
0.50-0.99	127	133	140	29	18	49	1	1	1	1	1	1	1	11
1.00-1.49	127	133	140	29	18	49	1	1	1	1	1	1	1	33
1.50-1.99	127	133	140	29	18	49	1	1	1	1	1	1	1	33
2.00-2.49	127	133	140	29	18	49	1	1	1	1	1	1	1	33
2.50-2.99	127	133	140	29	18	49	1	1	1	1	1	1	1	33
3.00-3.49	127	133	140	29	18	49	1	1	1	1	1	1	1	33
3.50-3.99	127	133	140	29	18	49	1	1	1	1	1	1	1	33
4.00-4.49	127	133	140	29	18	49	1	1	1	1	1	1	1	33
4.50-4.99	127	133	140	29	18	49	1	1	1	1	1	1	1	33
5.00-5.49	127	133	140	29	18	49	1	1	1	1	1	1	1	33
5.50-5.99	127	133	140	29	18	49	1	1	1	1	1	1	1	33
6.00-6.49	127	133	140	29	18	49	1	1	1	1	1	1	1	33
TOTAL	270	919	1485	1314	1906	2367	1445	244	2	0				58440

MEAN HS(M) = 2.46 LARGEST HS(M) = 7.68 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MONTH

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MONTH

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 2.5
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.2
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.7
LARGEST WAVE HS . . . . . (METERS) 5.7
LARGEST WAVE TP . . . . . (SECONDS) 16.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES) 85.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . . 69121200

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PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0.0 - 14.9
 LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	56	15	.	.	.	.	.	.	.	.	61
0.50-0.99	42	.	.	.	.	.	.	.	.	.	57
1.00-1.49	1	.	.	.	.	.	.	.	.	.	1
1.50-1.99	.	.	.	.	.	.	.	.	.	.	0
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	99	20	0	0	0	0	0	0	0	0	71

MEAN HS(M) = 0.48 LARGEST HS(M) = 1.03 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 71

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	169	15	17	46	22	5	23	.	.	.	133
0.50-0.99	1216	559	554	46	140	14	1	.	.	.	1370
1.00-1.49	617	3634	2324	520	140	14	.	.	.	.	837
1.50-1.99	22	1439	963	403	137	102	.	.	.	.	1163
2.00-2.49	.	17	97	37	49	100	.	.	.	.	126
2.50-2.99	.	1	11	13	51	3	.	.	.	.	131
3.00-3.49	.	.	.	6	3	11	.	.	.	.	24
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2025	10577	6715	1856	927	324	38	0	0	0	13142

MEAN HS(M) = 1.68 LARGEST HS(M) = 4.98 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 13142

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 39.60N/123.80W LAT. LON. END= 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	.	1	1	169	61	8	1	5	.	.	13
0.50-0.99	.	70	451	1596	4354	1383	54	13	.	.	816
1.00-1.49	3	284	2412	1996	1537	383	27	13	.	.	1363
1.50-1.99	.	97	2190	15219	1647	633	410	63	.	.	1336
2.00-2.49	11	82	378	2476	5934	3790	1036	42	.	.	12902
2.50-2.99	.	65	124	458	3952	6615	24529	124	.	.	12902
3.00-3.49	.	22	80	164	1396	5489	3336	13	.	.	9710
3.50-3.99	.	3	58	70	465	3501	3370	11	.	.	7069
4.00-4.49	.	.	17	20	149	1555	3339	5	.	.	4505
4.50-4.99	.	.	.	1	13	154	2200	3	.	.	3027
5.00+	.	.	.	.	3	152	2070	1317	.	.	3546
TOTAL	17	624	5711	10574	17814	23748	14836	2566	82	0	44422

MEAN HS(M) = 2.78 LARGEST HS(M) = 7.20 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 44422

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 39.60N/123.80W LAT. LON. END = 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	.	.	.	.	.	.	.	.	.	9
1.00-1.49	8	25	25	.	3	.	.	.	.	.	61
1.50-1.99	6	46	32	8	13	.	.	.	.	.	111
2.00-2.49	3	114	84	54	54	6	.	.	.	.	320
2.50-2.99	.	63	100	65	49	22	.	.	.	.	299
3.00-3.49	.	11	97	49	35	1	.	.	.	.	258
3.50-3.99	.	.	34	30	54	13	.	.	.	.	136
4.00-4.49	.	.	13	15	22	15	.	.	.	.	70
4.50-4.99	.	.	.	3	8	8	.	.	.	.	24
5.00+	.	.	.	.	1	6	.	.	.	.	7
TOTAL	17	262	401	224	269	106	16	0	0	0	771

MEAN HS(M) = 2.79 LARGEST HS(M) = 5.39 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 771

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 39.60N/123.80W LAT. LON. END = 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	.	.	.	.	.	.	.	.	.	1
0.50-0.99	3	6	.	.	.	.	.	.	.	.	9
1.00-1.49	2	11	.	.	.	.	.	.	.	.	16
1.50-1.99	8	11	.	.	.	.	.	.	.	.	19
2.00-2.49	.	8	.	.	.	.	.	.	.	.	8
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	36	0	0	0	0	0	0	0	0	32

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.47 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 32

PHASE 3 ST. 82 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 39.60N/123.80W LAT. LON. END = 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

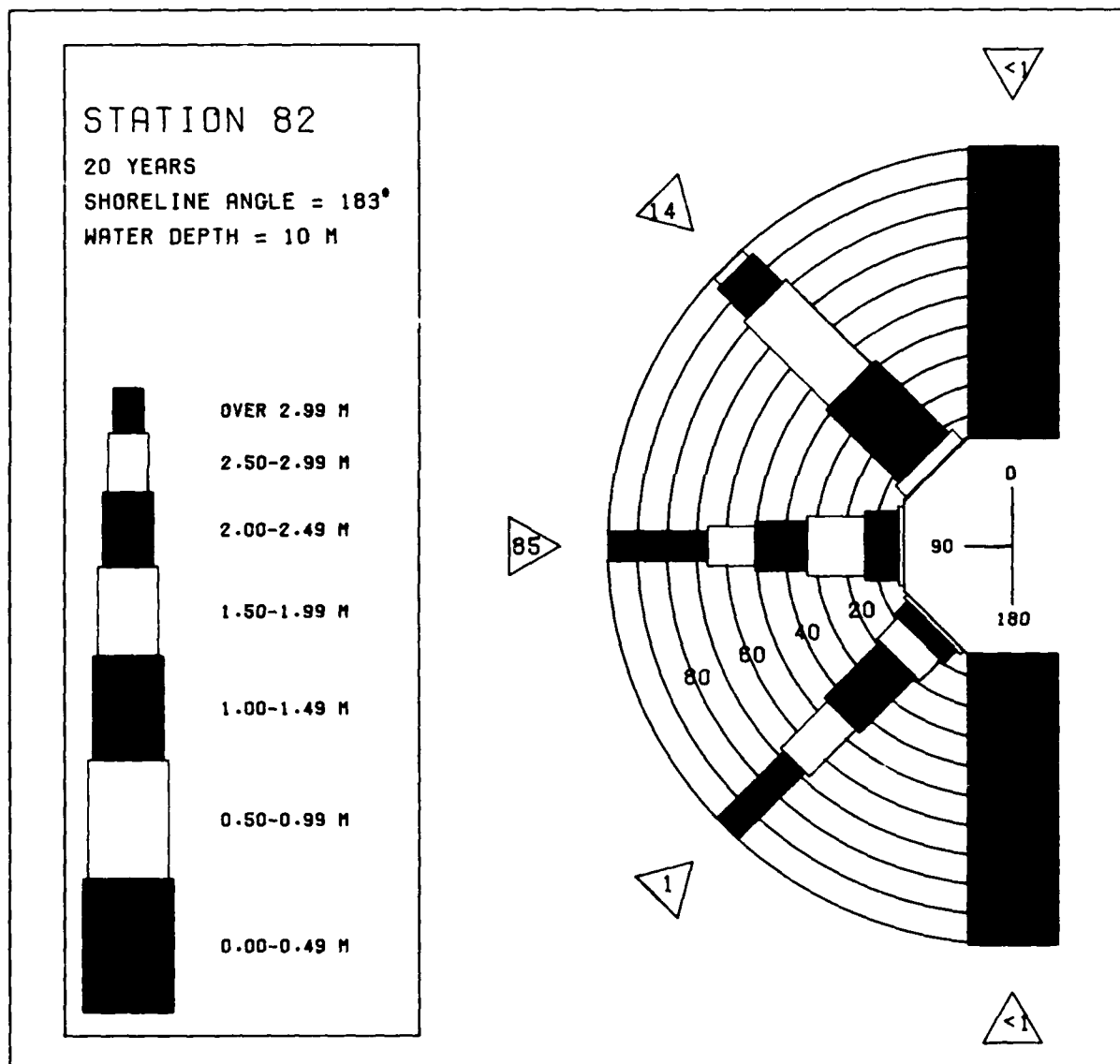
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	.	.	.	.	.	.	.	.	.	1
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.07 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 1

PHASE 3 ST. 82 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 39.60N/123.80W LAT. LON. END = 39.48N/123.80W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	6	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	9
0.5-0.99	12	3	10	21	11.7	13.3	15.3	18.1	22.2	LONGER	LONGER	23
1.0-1.49	21	6	10	21	11.8	13.3	15.3	18.1	22.2	LONGER	LONGER	145
1.5-1.99	12	3	10	21	11.7	13.3	15.3	18.1	22.2	LONGER	LONGER	224
2.0-2.49	6	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	171
2.5-2.99	3	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	143
3.0-3.49	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	103
3.5-3.99	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	72
4.0-4.49	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	45
4.5-4.99	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	30
5.0-5.49	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	17
5.5-5.99	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	10
6.0-6.49	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	6
6.5-6.99	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	3
7.0-7.49	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	1
7.5-7.99	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	1
8.0-8.49	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	1
8.5-8.99	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	1
9.0-9.49	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	1
9.5-9.99	1	1	1	1	10.6	11.8	13.4	15.4	18.1	22.2	LONGER	1
TOTAL	216	1150	1279	1262	1897	2412	1485	252	5	0	0	58440

MEAN HS(M) = 2.53 LARGEST HS(M) = 7.20 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 82 (39.60N/ 123.80W TO 39.48N/ 123.80W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1976	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1977	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1978	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1979	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1980	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1981	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1982	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1983	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1984	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1985	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1986	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1987	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1988	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1989	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1990	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1991	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1992	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1993	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1994	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1995	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1996	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1997	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1998	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
1999	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2000	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2001	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2002	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2003	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2004	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2005	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2006	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2007	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2008	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2009	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2010	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2011	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2012	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2013	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2014	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2015	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2016	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2017	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2018	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2019	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5
2020	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 82 (39.60N/ 123.80W TO 39.48N/ 123.80W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1976	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1977	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1978	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1979	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1980	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1981	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1982	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1983	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1984	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1985	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1986	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1987	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1988	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1989	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1990	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1991	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1992	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1993	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1994	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1995	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1996	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1997	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1998	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
1999	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2000	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2001	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2002	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2003	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2004	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2005	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2006	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2007	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2008	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2009	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2010	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2011	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2012	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2013	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2014	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2015	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2016	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2017	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2018	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2019	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6
2020	3.4	3.5	3.1	2.6	2.0	1.8	1.7	1.5	1.7	2.4	3.2	3.6

20 YR. STATISTICS FOR PACIFIC STATION 82 (39.60N/ 123.80W TO 39.48N/ 123.80W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN BEAK WAVE PERIOD	(SECONDS)	11.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.00
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.5
LARGEST WAVE HS	(METERS)	14.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 39.48N/123.80W LAT. LONG. END= 39.35N/123.81W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 39.48N/123.80W LAT. LONG. END= 39.35N/123.81W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	66	3	.	.	.	.	.	.	.	.	49
0.50 - 0.99	29	.	.	.	.	.	.	.	.	.	32
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	75	6	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.45 LARGEST HS(M) = 0.95 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 48

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 39.48N/123.80W LAT. LONG. END= 39.35N/123.81W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	155	15	43	30	17	3	11	.	.	.	27
0.50 - 0.99	1247	3283	1880	438	100	.	.	.	.	.	1142
1.00 - 1.49	713	4986	1810	400	188	.	.	.	.	.	6942
1.50 - 1.99	25	1656	899	333	121	18	.	.	.	.	3003
2.00 - 2.49	.	254	446	148	124	3	.	.	.	.	1051
2.50 - 2.99	.	1	13	6	22	23	3	.	.	.	309
3.00 - 3.49	.	.	.	.	1	8	6	.	.	.	168
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	150
4.00 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2141	10702	5592	1388	598	225	22	0	0	0	12096

MEAN HS(M) = 1.69 LARGEST HS(M) = 4.96 MEAN TP(SEC) = 7.7 NUMBER OF CASES = 12096

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 39.48N/123.80W LAT. LONG. END= 39.35N/123.81W
 SHORELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	87	52	177	50	53	13	5	.	.	17
0.50 - 0.99	.	331	2695	1990	1490	362	25	13	.	.	920
1.00 - 1.49	.	121	2677	5213	4322	1608	133	5	.	.	6913
1.50 - 1.99	.	102	475	2732	5946	3754	1009	41	.	.	14061
2.00 - 2.49	11	102	128	237	427	2526	1405	114	13	.	13087
2.50 - 2.99	.	30	106	169	1497	3559	3336	34	36	.	9919
3.00 - 3.49	.	.	63	80	508	1510	3368	11	11	.	7248
3.50 - 3.99	.	.	15	23	178	1509	3341	.	.	.	4570
4.00 - 4.99	.	.	1	1	23	571	3309	260	5	.	3070
5.00 +	155	3125	1324	3	.	3611
TOTAL	22	774	6687	10903	18091	23848	14858	2568	82	0	45510

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.16 MEAN TP(SEC) = 12.0 NUMBER OF CASES = 45510

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 105.1 - 134.9
 LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
 SHOVELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	5	5	1	3	6	1	1	1	1	0
0.50 - 0.99	6	25	27	10	15	15	1	1	1	1	11
1.00 - 1.49	1	107	107	54	61	27	1	1	1	1	125
1.50 - 1.99	1	59	107	58	56	15	1	1	1	1	111
2.00 - 2.49	1	11	80	42	68	35	1	1	1	1	107
2.50 - 2.99	1	1	35	27	42	15	1	1	1	1	124
3.00 - 3.49	1	1	8	10	27	13	1	1	1	1	64
3.50 - 3.99	1	1	1	3	5	11	1	1	1	1	22
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	5
5.00 +	1	1	1	1	1	1	1	1	1	1	1
TOTAL	14	254	390	205	277	113	15	0	0	0	756

MEAN HS(M) = 2.75 LARGEST HS(M) = 5.32 MEAN TP(SEC) = 9.5 NUMBER OF CASES = 756

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
 SHOVELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	6	1	1	1	1	1	1	1	1	0
0.50 - 0.99	3	15	1	1	1	1	1	1	1	1	18
1.00 - 1.49	6	6	1	1	1	1	1	1	1	1	14
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	6
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	0
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	0
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	0
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	0
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	0
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	0
5.00 +	1	1	1	1	1	1	1	1	1	1	0
TOTAL	12	35	0	0	0	0	0	0	0	0	30

MEAN HS(M) = 1.41 LARGEST HS(M) = 2.18 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 30

PHASE 3 ST. 83 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOVELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 39.48N/123.80W LAT. LON. END= 39.35N/123.81W
 SHOVELINE ANGLE = 185.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	1	1	1	1	1	1	1	1	1	0
0.50 - 0.99	1	1	1	1	1	1	1	1	1	1	0
1.00 - 1.49	1	1	1	1	1	1	1	1	1	1	0
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	0
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	0
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	0
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	0
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	0
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	0
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	0
5.00 +	1	1	1	1	1	1	1	1	1	1	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 83 (39.48N/ 123.80W TO 39.35N/ 123.81W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.4	3.5	3.1	2.7	2.1	1.8	1.7	1.5	1.7	2.4	3.2	3.6	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 83 (39.48N/ 123.80W TO 39.35N/ 123.81W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	5.4	5.7	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

20 YR. STATISTICS FOR PACIFIC STATION 83 (39.48N/ 123.80W TO 39.35N/ 123.81W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.1
LARGEST WAVE HS	(METERS)	5.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012000

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
 SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0	0	0	0	0	0	0	0	0	0	0
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
 SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0	0	0	0	0	0	0	0	0	0	32
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	547
1.00 - 1.49	1629	3052	44	0	0	0	0	0	0	0	4735
1.50 - 1.99	515	3672	87	0	0	0	0	0	0	0	4274
2.00 - 2.49	0	299	42	0	0	0	0	0	0	0	341
2.50 - 2.99	0	1	5	0	0	0	0	0	0	0	6
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2412	7345	178	0	0	0	0	0	0	0	5809

MEAN HS(M) = 1.47 LARGEST HS(M) = 2.79 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 5809

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
 SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0	0	0	0	0	0	0	0	0	0	37
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	30
1.00 - 1.49	160	1655	112	231	171	40	0	0	0	0	2037
1.50 - 1.99	116	1645	39	234	196	40	0	0	0	0	2037
2.00 - 2.49	20	1645	39	234	196	40	0	0	0	0	2037
2.50 - 2.99	0	1645	39	234	196	40	0	0	0	0	2037
3.00 - 3.49	0	1645	39	234	196	40	0	0	0	0	2037
3.50 - 3.99	0	1645	39	234	196	40	0	0	0	0	2037
4.00 - 4.49	0	1645	39	234	196	40	0	0	0	0	2037
4.50 - 4.99	0	1645	39	234	196	40	0	0	0	0	2037
5.00 +	0	1645	39	234	196	40	0	0	0	0	2037
TOTAL	200	4397	1110	11075	16126	17449	6290	39	1	0	36989

MEAN HS(M) = 2.26 LARGEST HS(M) = 6.62 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 36989

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 39.35N/123.81W LAT. LON. END= 39.21N/123.78W
 SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0	0	0	0	0	0	0	0	0	0	4
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	140
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	820
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	2054
2.00 - 2.49	13	54	135	253	467	634	20	10	0	0	1409
2.50 - 2.99	0	54	135	253	467	634	20	10	0	0	1409
3.00 - 3.49	0	54	135	253	467	634	20	10	0	0	1409
3.50 - 3.99	0	54	135	253	467	634	20	10	0	0	1409
4.00 - 4.49	0	54	135	253	467	634	20	10	0	0	1409
4.50 - 4.99	0	54	135	253	467	634	20	10	0	0	1409
5.00 +	0	54	135	253	467	634	20	10	0	0	1409
TOTAL	19	183	642	1013	2478	6431	8459	2489	72	0	12754

MEAN HS(M) = 3.21 LARGEST HS(M) = 7.37 MEAN TP(SEC) = 13.3 NUMBER OF CASES = 12754

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 39.35N/123.81W LAT. LON. END = 39.21N/123.78W
 SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	.	.	.	.	.	.	.	.	.	0
1.0-1.49	1	3	3	.	.	.	.	.	.	.	1
1.5-1.99	2	3	2	1	3	5	.	.	.	.	2
2.0-2.49	8	14	18	17	3	.	.	.	.	.	5
2.5-2.99	.	6	16	51	27	.	.	.	.	.	10
3.0-3.49	.	20	15	102	37	3	.	.	.	.	14
3.5-3.99	.	1	8	61	77	20	.	.	.	.	11
4.0-4.49	.	.	3	54	30	13	.	.	.	.	13
4.5-4.99	.	.	5	20	20	6	.	.	.	.	5
5.0-5.49	.	.	1	.	.	3	.	.	.	.	1
5.5-5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	34	327	549	306	194	60	3	0	0	0	872

MEAN HS(M) = 3.05 LARGEST HS(M) = 5.93 MEAN TP(SEC) = 9.1 NUMBER OF CASES = 872

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 39.35N/123.81W LAT. LON. END = 39.21N/123.78W
 SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	.	.	.	.	.	.	.	.	.	0
1.0-1.49	1	.	.	.	.	.	.	.	.	.	1
1.5-1.99	1	.	.	.	.	.	.	.	.	.	1
2.0-2.49	1	.	.	.	.	.	.	.	.	.	1
2.5-2.99	1	.	.	.	.	.	.	.	.	.	1
3.0-3.49	1	.	.	.	.	.	.	.	.	.	1
3.5-3.99	1	.	.	.	.	.	.	.	.	.	1
4.0-4.49	1	.	.	.	.	.	.	.	.	.	1
4.5-4.99	1	.	.	.	.	.	.	.	.	.	1
5.0-5.49	1	.	.	.	.	.	.	.	.	.	1
5.5-5.99	1	.	.	.	.	.	.	.	.	.	1
TOTAL	9	16	0	0	0	0	0	0	0	0	16

MEAN HS(M) = 1.47 LARGEST HS(M) = 2.20 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 16

PHASE 3 ST. 84 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 39.35N/123.81W LAT. LON. END = 39.21N/123.78W
 SHORELINE ANGLE = 165.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

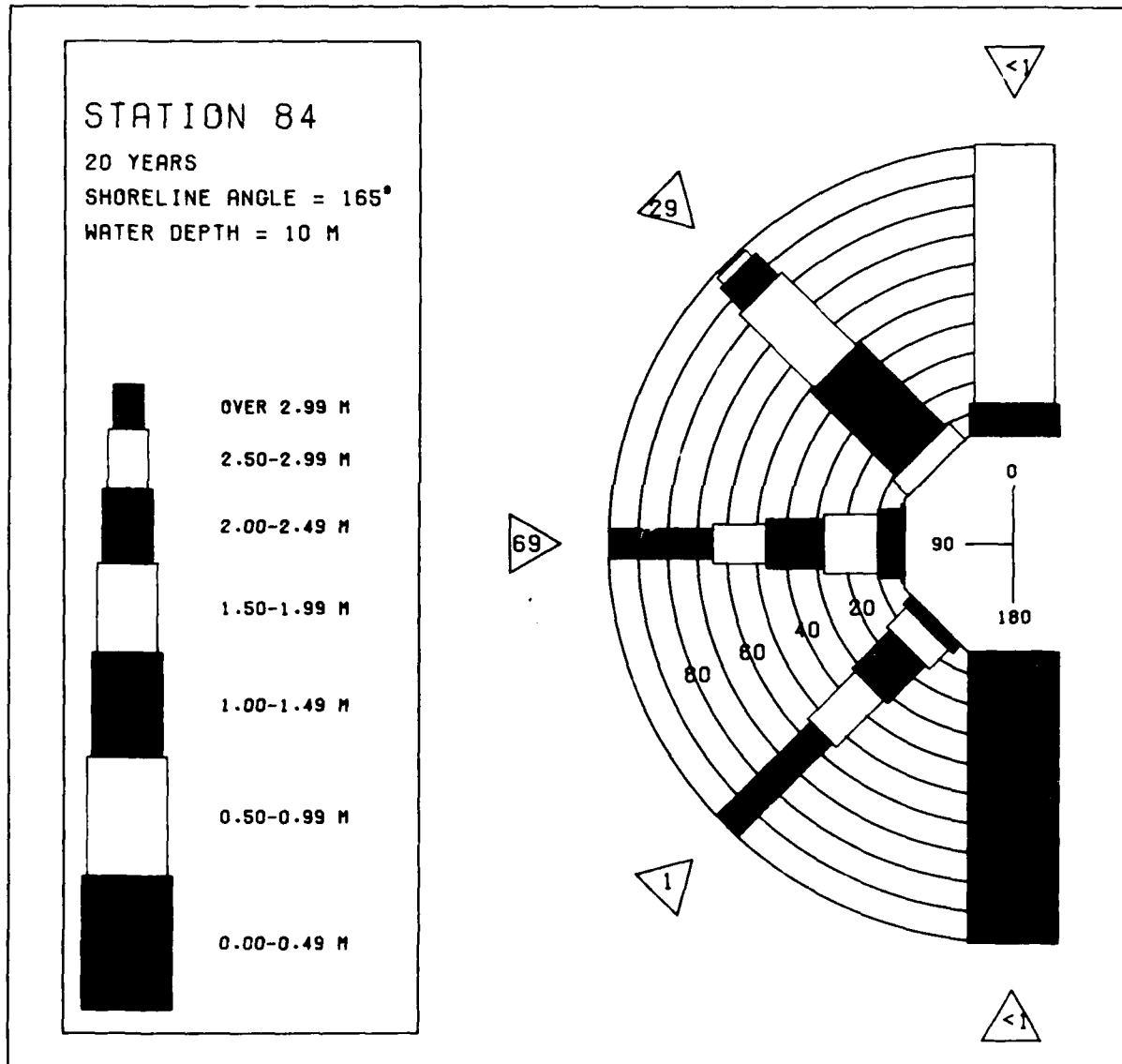
HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 84 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 39.35N/123.81W LAT. LONG. END= 39.21N/123.78W
 SHORELINE ANGLE = 165° (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	26	86	12	31	18	2	2	1	1	1	6
0.5-0.99	170	478	523	312	220	253	52	15	1	1	29
1.0-1.49	66	491	375	589	331	216	50	1	1	1	33
1.5-1.99	4	131	114	205	600	111	115	1	1	1	33
2.0-2.49	..	29	55	249	332	69	18	16	1	1	37
2.5-2.99	..	6	33	13	14	66	23	36	1	1	40
3.0-3.49	..	..	15	2	13	27	34	27	1	1	40
3.5-3.99	..	..	6	..	3	10	18	30	1	1	40
4.0-4.49	..	..	..	..	..	3	11	110	..	..	238
4.5-4.99	..	..	..	..	..	..	..	..	..	..	..
5.0-5.49	..	..	..	..	..	..	..	..	..	..	..
5.5-5.99	..	..	..	..	..	..	..	..	..	..	..
TOTAL	266	1224	1245	1236	1875	2391	1470	248	5	0	58440

MEAN HS(M) = 2.40 LARGEST HS(M) = 7.37 MEAN TP(SEC)= 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 84 (39.35N/ 123.81W TO 39.21N/ 123.78W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.3	2.9	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 84 (39.35N/ 123.81W TO 39.21N/ 123.78W)

YEAR	MONTH												LARGEST HS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	5.0	5.7	4.5	3.3	3.0	2.2	2.0	2.3	2.7	3.3	3.7	4.2	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

20 YR. STATISTICS FOR PACIFIC STATION 84 (39.35N/ 123.81W TO 39.21N/ 123.78W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	6.6
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	77.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121121

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
 SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	17										17
0.50-1.00											0
1.01-1.50											0
1.51-2.00											0
2.01-2.50											0
2.51-3.00											0
3.01-3.50											0
3.51-4.00											0
4.01-4.50											0
4.51-5.00											0
5.00+											0
TOTAL	17	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.23 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 10

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
 SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	35	8									70
0.50-1.00	451	939									1434
1.01-1.50	1476	4789									6403
1.51-2.00	191	2289	169								2762
2.01-2.50		160	282								220
2.51-3.00			59								0
3.01-3.50											0
3.51-4.00											0
4.01-4.50											0
4.51-5.00											0
5.00+											0
TOTAL	2154	8225	510	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.32 LARGEST HS(M) = 2.37 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 6369

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
 SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	6	32	3	11	20	8				61
0.50-1.00		588	1817	501	314	106	20				3352
1.01-1.50	32	1259	6177	4231	2760	627	136				15240
1.51-2.00	56	523	2614	5737	6319	2582	600				18450
2.01-2.50	8	431	2500	1262	2533	5691	1069				14434
2.51-3.00		90	2255	332	2188	5898	1842				10593
3.01-3.50		10	88	119	617	3708	2224				6808
3.51-4.00			25	35	205	1671	3334				4439
4.01-4.50			1	1	37	588	2075				2900
4.51-5.00					3	128	1076				1479
5.00+						18	492				1081
TOTAL	97	2907	11569	12121	17780	21028	11868	1561	6	0	0

MEAN HS(M) = 2.28 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 46153

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
 SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	1	37	5							1
0.50-1.00		13	41	35	104	29					61
1.01-1.50	5	37	53	44	131	304	11				246
1.51-2.00	13	68	65	68	208	651	331				749
2.01-2.50	1	71	61	61	188	728	504				1469
2.51-3.00		23	116	54	107	453	530				1421
3.01-3.50			73	13	22	342	484				1148
3.51-4.00			34	15	25	87	395				645
4.01-4.50			1	10	18	32	288				441
4.51-5.00				5	1	37	143				489
5.00+											0
TOTAL	32	235	482	315	874	2663	2775	953	54	0	4924

MEAN HS(M) = 3.12 LARGEST HS(M) = 7.36 MEAN TP(SEC) = 13.0 NUMBER OF CASES = 4924

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOPELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
 SHOPELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.000000	.	.	.	.	.	.	.	.	.	.	0
0.050000	.	.	.	.	.	.	.	.	.	.	0
0.100000	3	34	1	.	.	.	.	.	.	.	38
0.150000	30	175	25	.	.	.	.	.	.	.	100
0.200000	6	142	188	4	3	.	.	.	.	.	247
0.250000	.	123	165	41	15	.	.	.	.	.	144
0.300000	.	44	159	95	30	.	.	.	.	.	181
0.350000	.	1	107	88	37	3	.	.	.	.	167
0.400000	.	.	35	32	23	11	.	.	.	.	74
0.450000	.	.	8	6	17	.	.	.	.	.	24
0.500000	.	.	.	.	.	.	.	.	.	.	0
TOTAL	39	419	589	352	195	57	0	0	0	0	977

MEAN HS(M) = 3.13 LARGEST HS(M) = 6.17 MEAN TP(SEC) = 9.0 NUMBER OF CASES = 977

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOPELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
 SHOPELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.000000	0
0.050000	0
0.100000	3	5	.	.	.	.	.	.	.	.	0
0.150000	0
0.200000	0
0.250000	0
0.300000	0
0.350000	0
0.400000	0
0.450000	0
0.500000	0
TOTAL	6	5	0	0	0	0	0	0	0	0	7

MEAN HS(M) = 1.13 LARGEST HS(M) = 1.48 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 7

PHASE 3 ST. 85 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHOPELINE IN DEGREES)= 105.0 - 120.0
 LAT. LON. START= 39.21N/123.78W LAT. LON. END= 39.10N/123.70W
 SHOPELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.000000	0
0.050000	0
0.100000	0
0.150000	0
0.200000	0
0.250000	0
0.300000	0
0.350000	0
0.400000	0
0.450000	0
0.500000	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 39.10N/123.70W LAT. LONG. END= 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 39.10N/123.70W LAT. LONG. END= 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	18
0.50-0.99	.	.	.	.	.	.	.	.	.	.	446
1.00-1.49	234	212	.	.	.	.	.	.	.	.	3988
1.50-1.99	1213	2746	29	.	.	.	.	.	.	.	2532
2.00-2.49	355	2174	1	.	.	.	.	.	.	.	27
2.50-2.99	.	27	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1807	5172	30	0	0	0	0	0	0	0	4099

MEAN HS(M) = 1.40 LARGEST HS(M) = 2.12 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 4099

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 39.10N/123.70W LAT. LONG. END= 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	33
0.50-0.99	.	.	.	.	.	.	.	.	.	.	19
1.00-1.49	140	63	80	244	80	63	14	.	.	.	1080
1.50-1.99	224	307	100	1094	13	280	1	.	.	.	1694
2.00-2.49	27	110	140	190	13	280	20	1	.	.	1174
2.50-2.99	.	112	100	132	20	280	.	.	.	.	801
3.00-3.49	.	23	100	158	66	173	0	.	.	.	428
3.50-3.99	.	.	9	6	217	173	0	.	.	.	2097
4.00-4.49	.	.	.	1	66	278	.	.	.	.	909
4.50-4.99	.	.	.	.	0	271	.	.	.	.	399
5.00+	.	.	.	.	.	.	.	.	.	.	183
TOTAL	392	7218	10774	10419	14374	13540	651	32	1	0	33565

MEAN HS(M) = 2.12 LARGEST HS(M) = 6.63 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 33565

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 39.10N/123.70W LAT. LONG. END= 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	.	.	.	.	.	.	.	.	.	156
1.00-1.49	8	94	204	308	443	154	18	11	.	.	1334
1.50-1.99	10	83	259	583	881	942	350	34	3	.	3245
2.00-2.49	6	109	130	357	653	1914	1804	58	6	.	4337
2.50-2.99	.	63	100	193	894	2414	1565	107	1	.	5338
3.00-3.49	.	22	95	95	1521	2039	2243	176	15	.	5211
3.50-3.99	.	1	32	49	254	1567	2590	210	6	.	4772
4.00-4.49	.	.	5	34	70	842	1330	278	6	.	3610
4.50-4.99	.	.	.	25	41	331	1085	370	1	.	2758
5.00+	.	.	.	3	17	112	1050	1360	5	.	3447
TOTAL	24	407	1196	1669	4091	10333	13935	2519	44	0	20020

MEAN HS(M) = 3.35 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 13.1 NUMBER OF CASES = 20020

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	33	278	478	218	208	42	12	0	0	0	753

MEAN HS(M) = 3.05 LARGEST HS(M) = 5.88 MEAN TP(SEC) = 9.1 NUMBER OF CASES = 753

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	1	3	0	0	0	0	0	0	0	0	3

MEAN HS(M) = 1.11 LARGEST HS(M) = 1.17 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 3

PHASE 3 ST. 86 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 39.10N/123.70W LAT. LON. END= 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

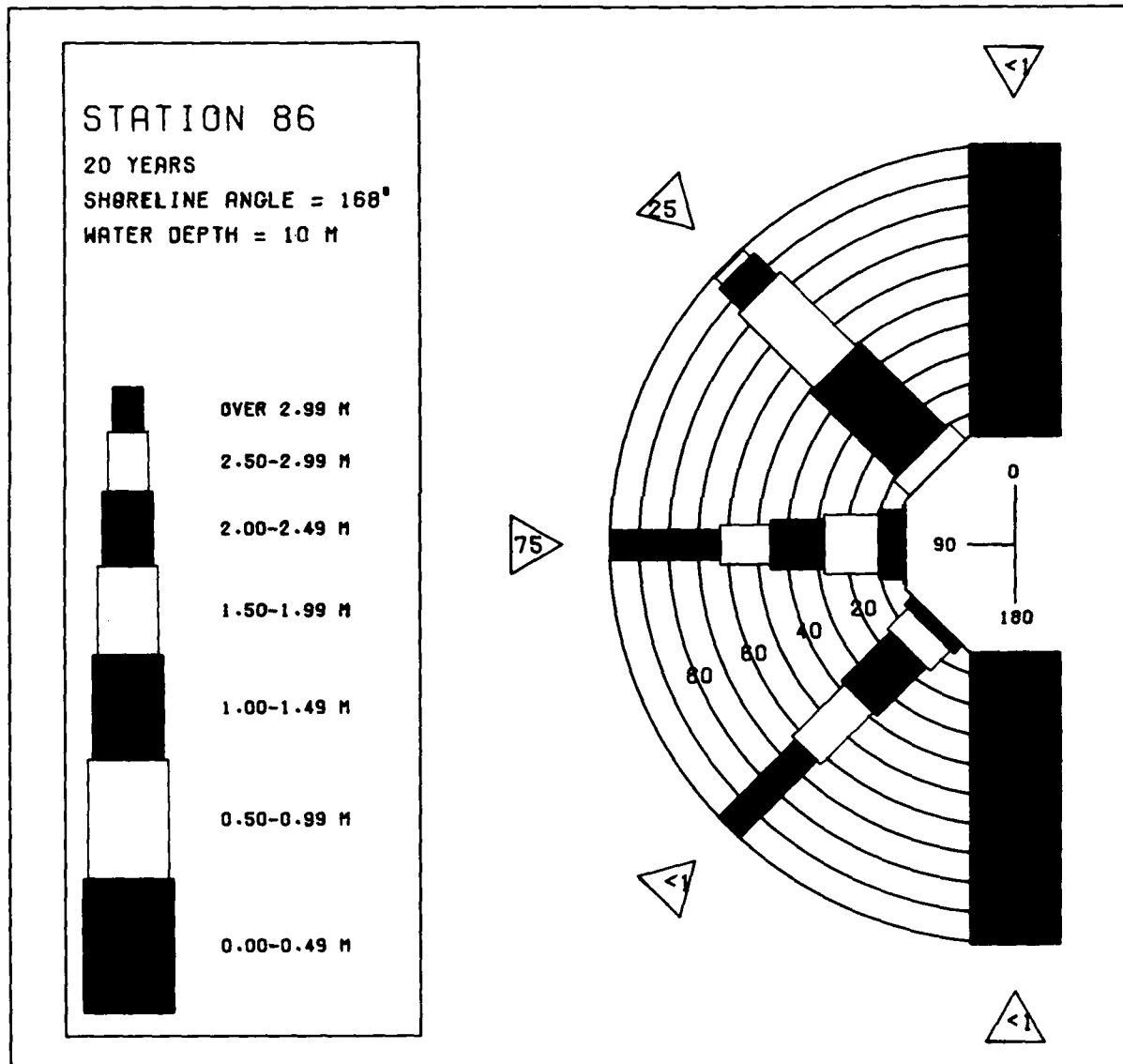
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 86 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. STAP = 39.10N/123.70W LAT. LON. END = 39.01N/123.70W
 SHORELINE ANGLE = 168.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.00-0.49	157	108	47	202	170	104	1	1	1	1	224
0.50-0.99	61	37	140	200	170	104	1	1	1	1	1305
1.00-1.49	3	6	140	200	170	104	1	1	1	1	1244
1.50-1.99	...	...	140	200	170	104	1	1	1	1	1227
2.00-2.49	...	...	140	200	170	104	1	1	1	1	1064
2.50-2.99	...	...	140	200	170	104	1	1	1	1	2309
3.00-3.49	...	...	140	200	170	104	1	1	1	1	1457
3.50-3.99	...	...	140	200	170	104	1	1	1	1	151
4.00-4.49	...	...	140	200	170	104	1	1	1	1	1
4.50-4.99	...	...	140	200	170	104	1	1	1	1	1
5.00+	...	...	140	200	170	104	1	1	1	1	1
TOTAL	224	1305	1244	1227	1064	2309	1457	151	1	0	58440

MEAN HS(M) = 2.50 LARGEST HS(M) = 7.41 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	3	.	.	.	.	.	.	.	.	6
0.50 - 0.99	47	172	34	1	.	.	.	.	.	.	254
1.00 - 1.49	889	1505	239	5	.	.	.	.	.	.	2638
1.50 - 1.99	1803	5561	477	6	.	.	.	.	.	.	7847
2.00 - 2.49	92	4683	744	11	1	.	.	.	.	.	5531
2.50 - 2.99	.	768	877	29	.	.	.	.	.	.	1674
3.00 - 3.49	.	70	439	49	1	.	.	.	.	.	559
3.50 - 3.99	.	.	65	22	.	.	.	.	.	.	87
4.00 - 4.49	.	.	8	1	.	.	.	.	.	.	9
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2834	12762	2883	124	2	0	0	0	0	0	10882

MEAN HS(M) = 1.96 LARGEST HS(M) = 4.23 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 10882

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	23
0.50 - 0.99	.	196	522	147	35	39	13	10	.	.	992
1.00 - 1.49	25	557	2528	1754	1069	2217	227	15	.	.	6507
1.50 - 1.99	106	441	2847	3271	3566	3391	23	44	.	.	13815
2.00 - 2.49	39	414	901	3372	5340	3700	2	54	.	.	13158
2.50 - 2.99	.	270	273	934	4770	5521	13007	82	.	.	10508
3.00 - 3.49	.	54	184	191	2058	5989	13309	162	11	.	10548
3.50 - 3.99	.	1	83	90	677	2264	3333	102	108	.	7248
4.00 - 4.49	.	.	18	47	1355	2219	3331	246	103	.	5193
4.50 - 4.99	.	.	3	3	200	840	3333	246	51	.	4755
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	170	1933	7711	10519	17670	23704	14642	2594	48	0	46186

MEAN HS(M) = 2.88 LARGEST HS(M) = 7.36 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 46186

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	.	.	.	.	.	0
0.5-0.99	.	11	8	3	13	.	.	.	.	.	23
1.0-1.49	.	66	116	13	1	.	.	.	.	.	217
1.5-1.99	.	82	154	49	61	8	.	.	.	.	360
2.0-2.49	5	20	135	87	121	29	.	.	.	.	460
2.5-2.99	.	30	100	87	155	56	3	.	.	.	439
3.0-3.49	.	5	78	68	97	90	1	.	.	.	339
3.5-3.99	.	.	27	20	68	80	15	.	.	.	111
4.0-4.49	.	.	1	23	18	42	34	.	.	.	118
4.5-4.99	6	29	27	.	.	.	62
5.0-5.49	1	18	3	.	.	.	22
5.5-5.99
TOTAL	19	275	619	350	541	353	84	0	0	0	

MEAN HS(M) = 2.66 LARGEST HS(M) = 5.75 MEAN TP(SEC) = 10.1 NUMBER OF CASES = 1326

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	.	.	.	.	.	.	.	.	.	0
1.0-1.49	3	6	6	.	.	.	.	.	.	.	1
1.5-1.99	5	18	15	.	.	.	.	.	.	.	28
2.0-2.49	.	8	.	.	.	.	.	.	.	.	8
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	33	26	0	0	0	0	0	0	0	

MEAN HS(M) = 1.42 LARGEST HS(M) = 2.28 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 45

PHASE 3 ST. 87 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 39.01N/123.70W LAT. LON. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

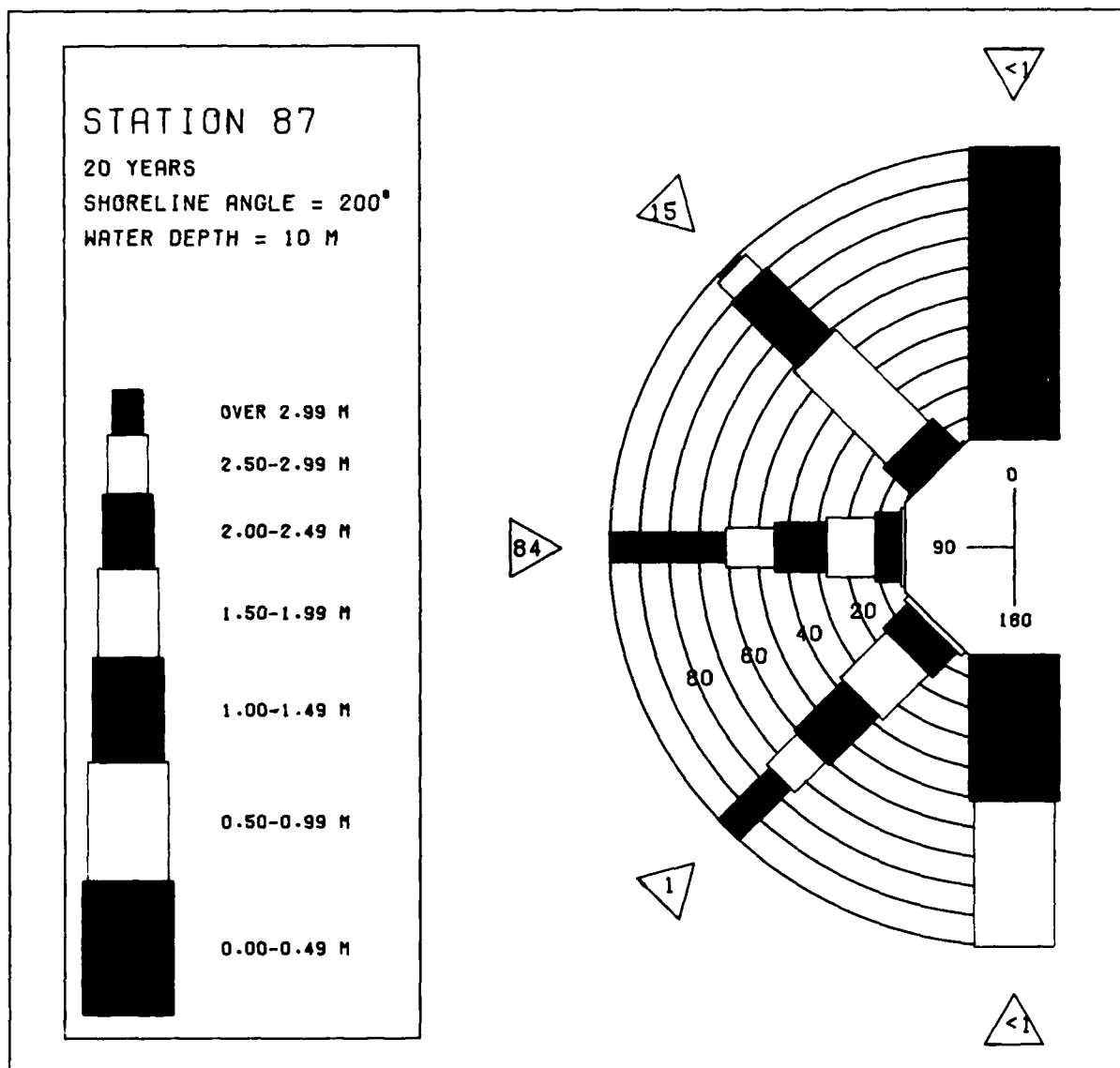
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
TOTAL	1	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.13 LARGEST HS(M) = 0.13 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 1

PHASE 3 ST. 87 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 39.01N/123.70W LAT. LONG. END= 38.95N/123.73W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	5	38	60	15	3	3	1	1	..	..	2
0.50-0.99	92	213	319	178	108	21	2	1	..	..	126
1.00-1.49	192	610	348	402	362	133	24	4	..	..	934
1.50-1.99	13	518	178	347	546	299	70	5	..	..	2081
2.00-2.49	..	106	125	105	492	557	130	8	..	..	1976
2.50-2.99	..	13	70	30	215	607	196	16	1	..	1523
3.00-3.49	..	..	17	13	74	434	256	17	..	..	1148
3.50-3.99	..	..	2	7	15	226	255	24	1	..	811
4.00-4.49	..	..	..	..	2	86	239	25	..	..	530
4.50-4.99	..	..	..	..	..	27	295	154	..	..	352
5.00+	..	..	..	..	..	..	..	..	..	..	476
TOTAL	302	1498	1121	1097	1817	2399	1468	255	2	0	58440

MEAN HS(M) = 2.70 LARGEST HS(M) = 7.36 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0. - 14.9
 LAT. LON. START = 38.95N/123.73W LAT. LON. END = 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	30	0	0	0	0	0	0	0	0	0	30
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	30	0	0	0	0	0	0	0	0	0	30

MEAN HS(M) = 0.12 LARGEST HS(M) = 0.23 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 18

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 38.95N/123.73W LAT. LON. END = 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	75	68	25	0	0	0	0	0	0	0	143
0.50-0.99	864	2547	859	0	0	0	0	0	0	0	3662
1.00-1.49	1266	5331	859	0	0	0	0	0	0	0	7466
1.50-1.99	145	1199	316	0	0	0	0	0	0	0	1660
2.00-2.49	0	114	27	0	0	0	0	0	0	0	141
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2350	9260	1463	0	0	0	0	0	0	0	143

MEAN HS(M) = 1.17 LARGEST HS(M) = 2.72 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 7644

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 38.95N/123.73W LAT. LON. END = 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	3	6	82	5	56	15	22	10	0	0	129
0.50-0.99	17	804	3004	1247	4643	1536	2722	1026	0	0	12945
1.00-1.49	32	781	5855	6317	4698	1536	2722	1026	0	0	23547
1.50-1.99	5	400	1505	3697	3383	1026	1909	337	0	0	14805
2.00-2.49	0	325	439	627	3383	1026	1909	337	0	0	9725
2.50-2.99	0	145	160	160	3383	1026	1909	337	0	0	6311
3.00-3.49	0	8	63	10	3383	1026	1909	337	0	0	3000
3.50-3.99	0	0	11	10	3383	1026	1909	337	0	0	2118
4.00-4.49	0	0	0	0	3383	1026	1909	337	0	0	9700
4.50-4.99	0	0	0	0	3383	1026	1909	337	0	0	692
5.00+	0	0	0	0	3383	1026	1909	337	0	0	692
TOTAL	57	2423	11104	12122	17540	22585	13731	2442	22	0	692

MEAN HS(M) = 2.11 LARGEST HS(M) = 6.95 MEAN TP(SEC) = 11.6 NUMBER OF CASES = 47957

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 38.95N/123.73W LAT. LON. END = 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	68	395	567	330	359	471	682	117	30	0	1782

MEAN HS(M) = 2.98 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 1782

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	20	18	1	.	.	.	.	.	.	.	39
1.50 - 1.99	47	83	30	.	.	.	.	.	.	.	150
2.00 - 2.49	8	200	90	10	.	.	.	.	.	.	308
2.50 - 2.99	.	186	142	29	8	.	.	.	.	.	365
3.00 - 3.49	.	53	215	42	3	.	.	.	.	.	313
3.50 - 3.99	.	5	147	109	18	.	.	.	.	.	279
4.00 - 4.49	.	.	66	102	30	6	.	.	.	.	204
4.50 - 4.99	.	.	8	5	27	5	.	.	.	.	45
5.00 +	.	.	.	3	10	5	.	.	.	.	18
TOTAL	75	545	689	300	96	16	0	0	0	0	

MEAN HS(M) = 3.04 LARGEST HS(M) = 5.59 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 1015

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	3	3	.	.	.	.	.	.	.	.	6
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	1
1.00 - 1.49	5	3	.	.	.	.	.	.	.	.	8
1.50 - 1.99	.	1	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	2
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13	22	0	0	0	0	0	0	0	0	

MEAN HS(M) = 1.44 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 23

PHASE 3 ST. 88 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 180.0
 LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

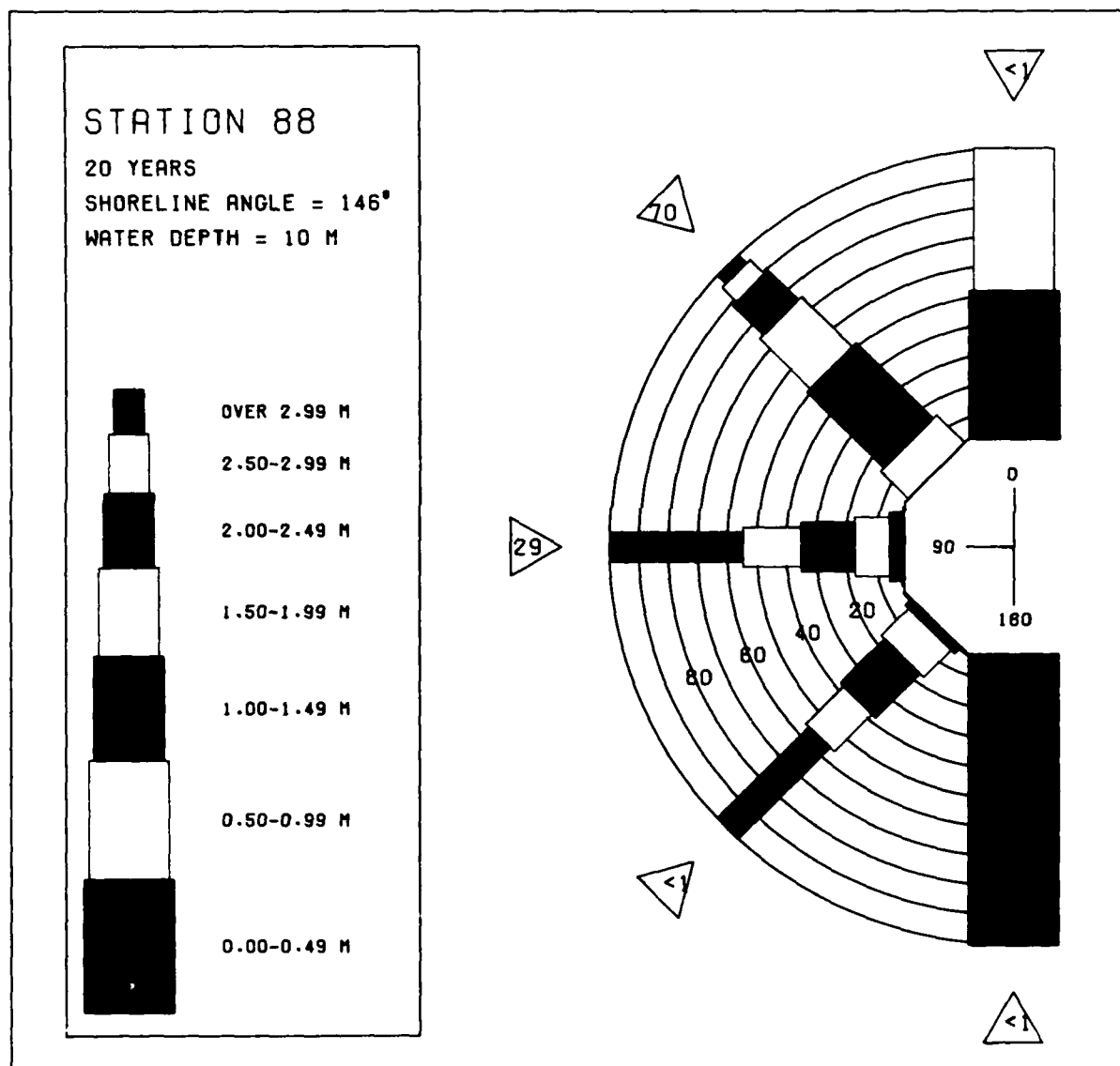
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 88 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 38.95N/123.73W LAT. LON. END= 38.83N/123.63W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)		PERIOD(SECONDS)											TOTAL
		4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER		
0.00-0.49	-	0	0	0	0	0	0	0	0	0	0	28	
0.50-0.99	-	100	336	328	124	56	16	2	1	0	0	948	
1.00-1.49	-	100	617	674	622	467	154	27	5	0	0	2707	
1.50-1.99	-	227	178	189	92	704	457	106	1	0	0	1715	
2.00-2.49	-	3	78	62	68	386	745	197	1	0	0	1553	
2.50-2.99	-	0	37	39	25	114	535	267	0	1	0	1063	
3.00-3.49	-	0	8	41	17	43	257	317	0	0	0	719	
3.50-3.99	-	0	1	26	16	12	100	267	0	0	0	451	
4.00-4.49	-	0	0	10	14	7	27	156	0	0	0	256	
4.50-4.99	-	0	0	1	3	6	8	57	0	0	0	114	
5.00-5.49	-	0	0	0	0	1	3	21	0	0	0	75	
TOTAL		257	1263	1378	1271	1796	2303	1437	252	2	0	58440	

MEAN HS(M) = 2.03 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LONG. START = 38.83N/123.63W LAT. LONG. END = 38.73N/123.51W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	56	0	0	0	0	0	0	0	0	0	56
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	56	0	0	0	0	0	0	0	0	0	56

MEAN HS(M) = 0.10 LARGEST HS(M) = 0.36 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 33

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LONG. START = 38.83N/123.63W LAT. LONG. END = 38.73N/123.51W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	261	357	41	0	0	0	0	0	0	0	659
0.50-0.99	1454	5920	1194	0	0	0	0	0	0	0	8568
1.00-1.49	716	3437	1074	0	0	0	0	0	0	0	5227
1.50-1.99	66	619	154	0	0	0	0	0	0	0	839
2.00-2.49	0	3	5	0	0	0	0	0	0	0	49
2.50-2.99	0	0	1	0	0	0	0	0	0	0	4
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2497	10380	2469	0	0	0	0	0	0	0	8973

MEAN HS(M) = 0.96 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 8973

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LONG. START = 38.83N/123.63W LAT. LONG. END = 38.73N/123.51W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	6	0	0	0	0	0	0	0	0	0	6
0.50-0.99	10	0	0	0	0	0	0	0	0	0	10
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	73	1514	10166	12138	17096	22080	13934	2471	46	0	46492

MEAN HS(M) = 1.83 LARGEST HS(M) = 6.80 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 46492

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LONG. START = 38.83N/123.63W LAT. LONG. END = 38.73N/123.51W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	179	887	1033	452	271	214	136	12	5	0	1882

MEAN HS(M) = 2.91 LARGEST HS(M) = 6.91 MEAN TP(SEC) = 9.0 NUMBER OF CASES = 1882

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	1	0	0	0	0	0	0	0	0	1
0.50-0.99	0	1	0	0	0	0	0	0	0	0	1
1.00-1.49	17	11	3	0	0	0	0	0	0	0	21
1.50-1.99	78	114	23	0	0	0	0	0	0	0	215
2.00-2.49	25	20	8	6	0	0	0	0	0	0	59
2.50-2.99	0	2	1	1	0	0	0	0	0	0	4
3.00-3.49	0	5	1	2	1	0	0	0	0	0	9
3.50-3.99	0	1	1	0	3	0	0	0	0	0	5
4.00-4.49	0	0	1	0	1	0	0	0	0	0	2
4.50-4.99	0	0	0	10	23	1	0	0	0	0	34
5.00-5.49	0	0	0	0	17	3	0	0	0	0	20
5.50+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	120	697	578	243	78	5	0	0	0	0	1016

MEAN HS(M) = 2.91 LARGEST HS(M) = 5.51 MEAN TP(SEC) = 8.2 NUMBER OF CASES = 1016

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00-5.49	0	0	0	0	0	0	0	0	0	0	0
5.50+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	48	12	0	0	0	0	0	0	0	0	37

MEAN HS(M) = 1.19 LARGEST HS(M) = 2.20 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 37

PHASE 3 ST. 89 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 38.83N/123.63W LAT. LON. END= 38.73N/123.51W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00-5.49	0	0	0	0	0	0	0	0	0	0	0
5.50+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8	0	0	0	0	0	0	0	0	0	8

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.17 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 5

WIS STATION 89 (38.83N/ 123.63W TO 38.73N/ 123.51W)

[illegible]

WIS STATION 89 (38.83N/ 123.63W TO 38.73N/ 123.51W)

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 89 (38.83N/ 123.63W TO 38.73N/ 123.51W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	16.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	96.8
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	630.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		630131Z

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 38.73N/123.51W LAT. LONG. END= 38.63N/123.41W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0	3	0	0	0	0	0	0	0	0	3
0.50 - 0.99	0	5	0	0	0	0	0	0	0	0	5
1.00 - 1.49	13	11	3	0	0	0	0	0	0	0	27
1.50 - 1.99	54	116	20	0	0	0	0	0	0	0	190
2.00 - 2.49	27	304	61	6	0	0	0	0	0	0	398
2.50 - 2.99	0	191	111	17	0	0	0	0	0	0	319
3.00 - 3.49	0	59	189	41	3	0	0	0	0	0	292
3.50 - 3.99	0	1	145	92	10	0	0	0	0	0	248
4.00 - 4.49	0	0	37	78	30	1	0	0	0	0	146
4.50 - 4.99	0	0	1	13	23	3	0	0	0	0	40
5.00 +	0	0	0	0	15	0	0	0	0	0	15
TOTAL	94	690	567	247	81	7	0	0	0	0	996

MEAN HS(M) = 2.93 LARGEST HS(M) = 5.61 MEAN TP(SEC) = 8.2 NUMBER OF CASES = 996

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 38.73N/123.51W LAT. LONG. END= 38.63N/123.41W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0	3	0	0	0	0	0	0	0	0	3
0.50 - 0.99	0	5	0	0	0	0	0	0	0	0	5
1.00 - 1.49	20	11	0	0	0	0	0	0	0	0	31
1.50 - 1.99	15	11	0	0	0	0	0	0	0	0	26
2.00 - 2.49	0	1	0	0	0	0	0	0	0	0	1
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	41	17	0	0	0	0	0	0	0	0	58

MEAN HS(M) = 1.25 LARGEST HS(M) = 2.56 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 37

PHASE 3 ST. 90 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 38.73N/123.51W LAT. LONG. END= 38.63N/123.41W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0	0	0	0	0	0	0	0	0	0	0
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
 SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	138	0	0	0	0	0	0	0	0	0	138
0.50-1.00	0	0	0	0	0	0	0	0	0	0	0
1.01-1.50	0	0	0	0	0	0	0	0	0	0	0
1.51-2.00	0	0	0	0	0	0	0	0	0	0	0
2.01-2.50	0	0	0	0	0	0	0	0	0	0	0
2.51-3.00	0	0	0	0	0	0	0	0	0	0	0
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0
3.51-4.00	0	0	0	0	0	0	0	0	0	0	0
4.01-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	138	0	0	0	0	0	0	0	0	0	138

MEAN HS(M) = 0.10 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 81

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
 SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	550	1586	196	0	0	0	0	0	0	0	2332
0.50-1.00	2210	8949	2441	0	0	0	0	0	0	0	13600
1.01-1.50	444	2796	925	0	0	0	0	0	0	0	4165
1.51-2.00	20	621	147	0	0	0	0	0	0	0	788
2.01-2.50	0	46	5	0	0	0	0	0	0	0	51
2.51-3.00	0	0	0	0	0	0	0	0	0	0	0
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0
3.51-4.00	0	0	0	0	0	0	0	0	0	0	0
4.01-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3224	13998	3714	0	0	0	0	0	0	0	2332

MEAN HS(M) = 0.84 LARGEST HS(M) = 2.39 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 12239

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
 SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	6	17	34	54	23	53	10	4	5	0	501
0.50-1.00	93	145	535	648	391	731	100	43	17	0	1691
1.01-1.50	53	196	1374	4002	3910	7316	1000	43	17	0	15484
1.51-2.00	10	164	400	451	2315	8018	3557	265	17	0	15484
2.01-2.50	0	17	248	177	1333	3401	4187	421	5	0	4848
2.51-3.00	0	0	12	41	233	2760	975	164	6	0	1846
3.01-3.50	0	0	1	6	3	276	431	164	0	0	795
3.51-4.00	0	0	0	3	0	23	169	25	0	0	359
4.01-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	150	1032	7856	11232	15953	21113	13378	2636	71	0	42928

MEAN HS(M) = 1.56 LARGEST HS(M) = 6.31 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 42928

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
 SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	289	18	13	1	0	0	0	0	0	0	309
0.50-1.00	959	104	161	208	11	1	0	0	0	0	1135
1.01-1.50	131	267	61	200	13	1	0	0	0	0	532
1.51-2.00	20	244	100	200	13	1	0	0	0	0	532
2.01-2.50	1	128	226	115	27	1	0	0	0	0	532
2.51-3.00	0	2	164	27	1	0	0	0	0	0	277
3.01-3.50	0	0	8	4	0	0	0	0	0	0	12
3.51-4.00	0	0	0	0	0	0	0	0	0	0	0
4.01-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	289	1302	1066	489	210	113	52	1	3	0	2078

MEAN HS(M) = 2.69 LARGEST HS(M) = 6.30 MEAN TP(SEC) = 8.4 NUMBER OF CASES = 2078

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
 SHORELINE ANGLE= 127.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER
0.0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0
TOTAL	274	773	465	109	22	0	0	0	0	0

MEAN HS(M) = 2.53 LARGEST HS(M) = 5.34 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 968

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
 SHORELINE ANGLE= 127.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER
0.0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0
TOTAL	163	20	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.42 LARGEST HS(M) = 1.81 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 109

PHASE 3 ST. 92 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 38.53N/123.30W LAT. LON. END= 38.43N/123.16W
 SHORELINE ANGLE= 127.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER
0.0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

STATION 92 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 38.53N/123.30W LAT. LON. END = 38.43N/123.16W
 SHORELINE ANGLE = 127.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0	630	1620	953	510	381	97	16	4	1	...	311
0.5	229	914	781	648	381	97	16	4	1	...	3060
1.0	67	315	231	401	896	731	118	9	1	...	2749
1.5	37	154	62	47	232	803	355	26	1	...	1718
2.0	...	522	43	19	64	341	419	49	1	...	1034
2.5	...	20	54	13	21	100	277	67	1	...	573
3.0	...	...	26	15	4	28	98	56	1	...	278
3.5	...	...	8	7	3	7	43	28	...	...	129
4.0	...	...	...	3	3	3	17	16	...	...	54
4.5	...	...	...	...	...	...	2	3	...	...	12
5.0	...	...	...	...	...	...	...	...	...	...	9
TOTAL	422	1711	1306	1177	1614	2118	1339	260	5	0	

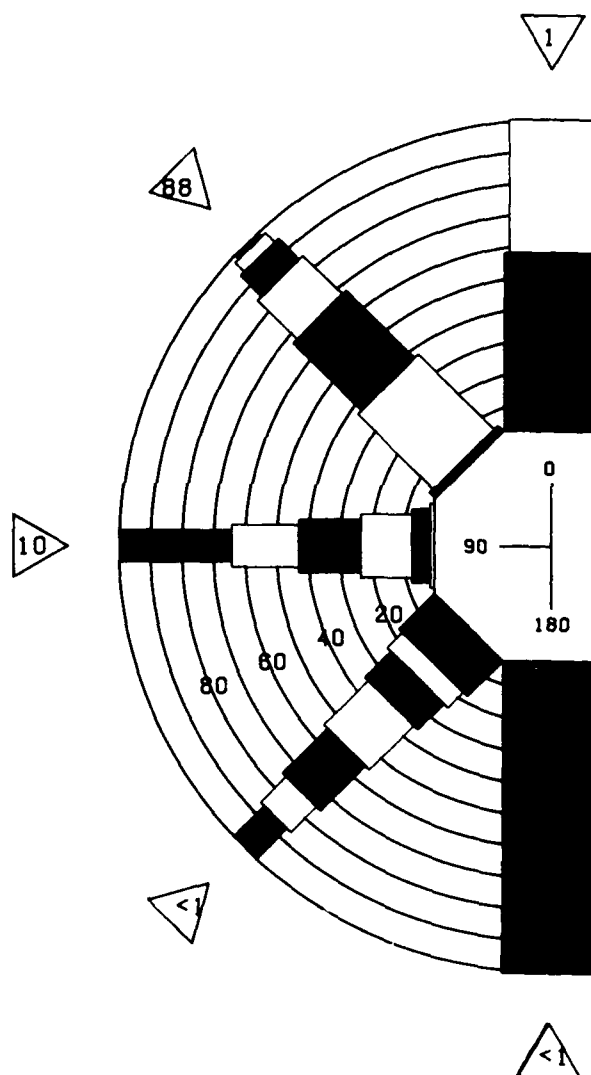
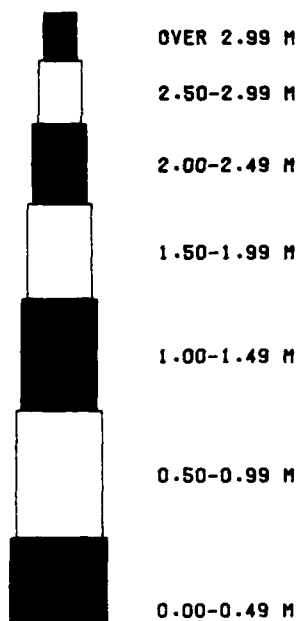
MEAN H(3M) = 1.46 LARGEST HS(M) = 6.31 MEAN TP(SEC) = 10.6 TOTAL CASES = 58440

STATION 92

20 YEARS

SHORELINE ANGLE = 127°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 92 (38.53N/ 123.30W TO 38.43N/ 123.16W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1955	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1956	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1957	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1958	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1959	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1960	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1961	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1962	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1964	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1972	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1973	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1975	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEAN	2.2	2.2	1.8	1.4	1.1	1.0	0.9	0.8	0.9	1.3	1.8	2.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 92 (38.53N/ 123.30W TO 38.43N/ 123.16W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1955	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1956	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1957	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1958	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1959	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1960	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1961	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1962	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1963	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1964	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1965	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1966	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1967	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1968	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1969	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1970	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1971	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1972	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1973	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1974	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
1975	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3

20 YR. STATISTICS FOR PACIFIC STATION 92 (38.53N/ 123.30W TO 38.43N/ 123.16W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	73.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63013121

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	.	.	.	.	.	.	.	.	.	3
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	3	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.06 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 2

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	118	180	95	105	117	133	153	181	222	.	284
0.50 - 0.99	853	1206	423	.	.	.	.	.	.	.	4431
1.00 - 1.49	1127	1306	983	.	.	.	.	.	.	.	7856
1.50 - 1.99	121	1428	318	.	.	.	.	.	.	.	1867
2.00 - 2.49	.	99	25	.	.	.	.	.	.	.	124
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2219	10469	1754	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.39 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 8445

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	20	107	149	10	6	6	1	.	.	158
0.50 - 0.99	1	641	3025	1493	703	210	20	8	1	.	6102
1.00 - 1.49	10	626	5242	6359	4777	1928	272	59	10	.	19263
1.50 - 1.99	29	330	1293	3608	7022	4832	1081	99	17	.	18311
2.00 - 2.49	10	414	448	633	3675	7267	2031	167	6	.	14551
2.50 - 2.99	.	97	188	160	1007	4964	2920	323	1	.	9660
3.00 - 3.49	.	13	66	49	311	2373	2902	335	.	.	6049
3.50 - 3.99	.	.	11	1	65	891	2575	308	1	.	3857
4.00 - 4.49	.	.	.	.	8	205	1409	434	.	.	2858
4.50 - 4.99	.	.	.	.	.	29	470	412	3	.	914
5.00 +	.	.	.	.	.	.	188	580	.	.	768
TOTAL	50	2141	10380	12297	17578	22705	13874	2726	40	0	0

MEAN HS(M) = 2.10 LARGEST HS(M) = 6.79 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 47821

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	.	5	6	.	.	.	.	.	.	.	11
1.00 - 1.49	25	42	17	10	41	1	.	.	.	.	136
1.50 - 1.99	47	185	34	34	53	42	35	.	.	.	338
2.00 - 2.49	10	133	65	41	42	53	27	5	.	.	382
2.50 - 2.99	.	71	47	65	56	63	61	18	30	.	411
3.00 - 3.49	.	23	128	61	58	51	128	17	8	.	474
3.50 - 3.99	.	5	65	25	42	49	70	8	.	.	270
4.00 - 4.49	.	.	29	32	15	35	75	22	5	.	213
4.50 - 4.99	.	.	11	3	3	22	32	8	1	.	79
5.00 +	.	.	.	.	.	.	.	.	.	.	56
TOTAL	82	364	402	281	310	334	455	78	64	0	0

MEAN HS(M) = 2.92 LARGEST HS(M) = 6.65 MEAN TP(SEC) = 11.0 NUMBER OF CASES = 1403

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	3	1	1	1	1	1	1	1	1	1	8
0.99	3	1	1	1	1	1	1	1	1	1	8
1.49	3	1	1	1	1	1	1	1	1	1	8
1.99	3	1	1	1	1	1	1	1	1	1	8
2.49	3	1	1	1	1	1	1	1	1	1	8
2.99	3	1	1	1	1	1	1	1	1	1	8
3.49	3	1	1	1	1	1	1	1	1	1	8
3.99	3	1	1	1	1	1	1	1	1	1	8
4.49	3	1	1	1	1	1	1	1	1	1	8
4.99	3	1	1	1	1	1	1	1	1	1	8
5.00	3	1	1	1	1	1	1	1	1	1	8
TOTAL	68	408	507	217	54	15	0	0	0	0	752

MEAN HS(M) = 2.86 LARGEST HS(M) = 5.73 MEAN TP(SEC) = 8.4 NUMBER OF CASES = 752

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	3	1	1	1	1	1	1	1	1	1	4
0.99	3	1	1	1	1	1	1	1	1	1	4
1.49	3	1	1	1	1	1	1	1	1	1	4
1.99	3	1	1	1	1	1	1	1	1	1	4
2.49	3	1	1	1	1	1	1	1	1	1	4
2.99	3	1	1	1	1	1	1	1	1	1	4
3.49	3	1	1	1	1	1	1	1	1	1	4
3.99	3	1	1	1	1	1	1	1	1	1	4
4.49	3	1	1	1	1	1	1	1	1	1	4
4.99	3	1	1	1	1	1	1	1	1	1	4
5.00	3	1	1	1	1	1	1	1	1	1	4
TOTAL	6	1	0	0	0	0	0	0	0	0	5

MEAN HS(M) = 0.32 LARGEST HS(M) = 0.83 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 5

PHASE 3 ST. 93 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 38.43N/123.16W LAT. LON. END= 38.36N/123.08W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	3	1	1	1	1	1	1	1	1	1	0
0.99	3	1	1	1	1	1	1	1	1	1	0
1.49	3	1	1	1	1	1	1	1	1	1	0
1.99	3	1	1	1	1	1	1	1	1	1	0
2.49	3	1	1	1	1	1	1	1	1	1	0
2.99	3	1	1	1	1	1	1	1	1	1	0
3.49	3	1	1	1	1	1	1	1	1	1	0
3.99	3	1	1	1	1	1	1	1	1	1	0
4.49	3	1	1	1	1	1	1	1	1	1	0
4.99	3	1	1	1	1	1	1	1	1	1	0
5.00	3	1	1	1	1	1	1	1	1	1	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00-0.49	3	1	1	1	1	1	1	1	1	1	10
0.50-0.99	10	10	10	10	10	10	10	10	10	10	100
1.00-1.49	8	10	10	10	10	10	10	10	10	10	100
1.50-1.99	10	10	10	10	10	10	10	10	10	10	100
2.00-2.49	10	10	10	10	10	10	10	10	10	10	100
2.50-2.99	10	10	10	10	10	10	10	10	10	10	100
3.00-3.49	10	10	10	10	10	10	10	10	10	10	100
3.50-3.99	10	10	10	10	10	10	10	10	10	10	100
4.00-4.49	10	10	10	10	10	10	10	10	10	10	100
4.50-4.99	10	10	10	10	10	10	10	10	10	10	100
5.00+	10	10	10	10	10	10	10	10	10	10	100
TOTAL	29	189	273	212	183	57	15	0	0	0	571

MEAN HS(M) = 2.69 LARGEST HS(M) = 5.76 MEAN TP(SEC) = 9.4 NUMBER OF CASES = 571

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00-0.49	1	3	1	1	1	1	1	1	1	1	11
0.50-0.99	5	11	3	1	1	1	1	1	1	1	23
1.00-1.49	5	15	3	1	1	1	1	1	1	1	34
1.50-1.99	1	3	1	1	1	1	1	1	1	1	11
2.00-2.49	1	3	1	1	1	1	1	1	1	1	11
2.50-2.99	1	3	1	1	1	1	1	1	1	1	11
3.00-3.49	1	3	1	1	1	1	1	1	1	1	11
3.50-3.99	1	3	1	1	1	1	1	1	1	1	11
4.00-4.49	1	3	1	1	1	1	1	1	1	1	11
4.50-4.99	1	3	1	1	1	1	1	1	1	1	11
5.00+	1	3	1	1	1	1	1	1	1	1	11
TOTAL	11	38	7	0	0	0	0	0	0	0	36

MEAN HS(M) = 1.33 LARGEST HS(M) = 2.18 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 36

PHASE 3 ST. 94 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

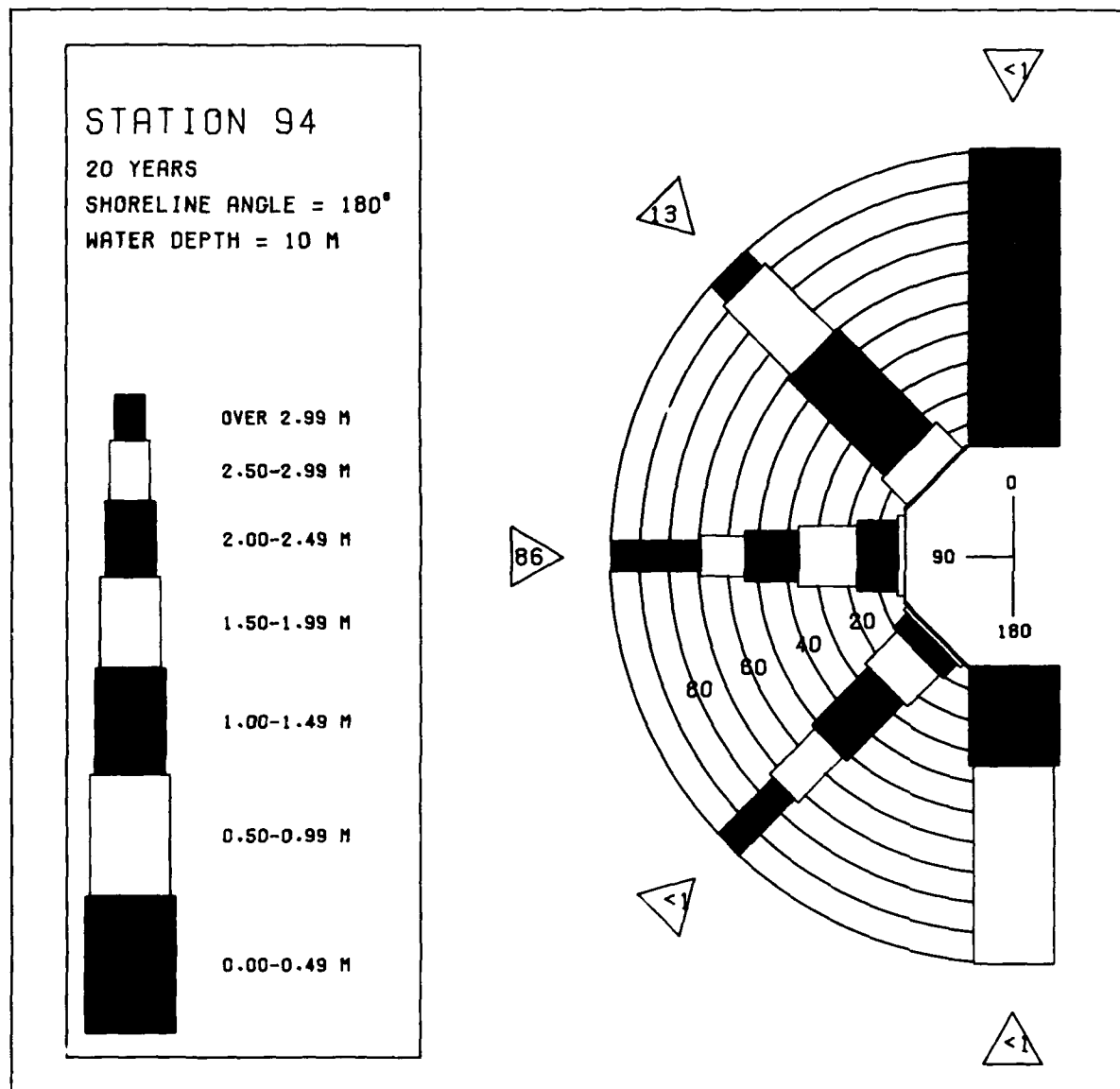
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00-0.49	1	1	1	1	1	1	1	1	1	1	10
0.50-0.99	1	1	1	1	1	1	1	1	1	1	10
1.00-1.49	1	1	1	1	1	1	1	1	1	1	10
1.50-1.99	1	1	1	1	1	1	1	1	1	1	10
2.00-2.49	1	1	1	1	1	1	1	1	1	1	10
2.50-2.99	1	1	1	1	1	1	1	1	1	1	10
3.00-3.49	1	1	1	1	1	1	1	1	1	1	10
3.50-3.99	1	1	1	1	1	1	1	1	1	1	10
4.00-4.49	1	1	1	1	1	1	1	1	1	1	10
4.50-4.99	1	1	1	1	1	1	1	1	1	1	10
5.00+	1	1	1	1	1	1	1	1	1	1	10
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 94 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 38.36N/123.08W LAT. LON. END= 38.31N/123.08W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	36	16	13	33	12	8	2	1	1	1	1	13
0.5-0.99	98	50	56	35	21	5	3	1	1	1	1	38
1.0-1.49	28	37	40	57	50	45	44	7	1	1	1	99
1.5-1.99	3	11	12	24	34	22	10	8	1	1	1	81
2.0-2.49	..	24	52	71	39	22	17	14	2	1	1	117
2.5-2.99	..	..	2	9	11	13	32	30	1	1	1	106
3.0-3.49	..	..	..	1	2	4	35	27	1	1	1	65
3.5-3.99	..	..	..	..	..	3	25	25	1	1	1	42
4.0-4.49	..	..	..	..	..	1	17	14	1	1	1	32
4.5-4.99	..	..	..	..	..	..	9	5	1	1	1	27
5.0-5.49	..	..	..	..	..	..	..	..	..	..	..	7
TOTAL	170	1193	1314	1307	1867	2362	1455	280	13	0	0	58440

MEAN HS(M) = 2.43 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 94 (38.36N/ 123.08W TO 38.31N/ 123.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1957	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1958	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1959	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1960	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1961	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1962	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1963	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1964	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1965	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1966	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1967	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1968	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1969	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1970	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1971	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1972	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1973	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1974	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
1975	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	2.5
MEAN	3.4	3.4	3.0	2.5	1.9	1.7	1.6	1.4	1.6	2.2	3.0	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 94 (38.36N/ 123.08W TO 38.31N/ 123.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1957	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1958	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1959	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1960	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1961	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1962	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1963	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1964	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1965	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1966	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1967	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1968	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1969	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1970	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1971	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1972	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1973	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1974	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
1975	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1

20 YR. STATISTICS FOR PACIFIC STATION 94 (38.36N/ 123.08W TO 38.31N/ 123.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.4
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.5
LARGEST WAVE HS	(METERS)	7.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012000

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
 SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	29	1400	44	10	11	1	0	0	0	0	1484
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	58	272	318	160	36	4	0	0	0	0	504

MEAN HS(M) = 2.64 LARGEST HS(M) = 4.86 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 504

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
 SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	1	0	0	0	0	0	0	0	0	0	1
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.02 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 95 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 38.31N/123.08W LAT. LON. END= 38.20N/122.96W
 SHORELINE ANGLE = 143.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0	0	0	0	0	0	0	0	0	0	0
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 95 (38.31N/ 123.08W TO 38.20N/ 122.96W)

YEAR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1975	2.8	2.8	2.4	2.0	1.5	1.4	1.2	1.1	1.2	1.7	2.4	2.8

MEAN
1.7
1.7
1.7
1.7
1.7
1.7
1.7
1.7
1.7
1.7
1.7
1.7

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 95 (38.31N/ 123.08W TO 38.20N/ 122.96W)

YEAR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1975	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

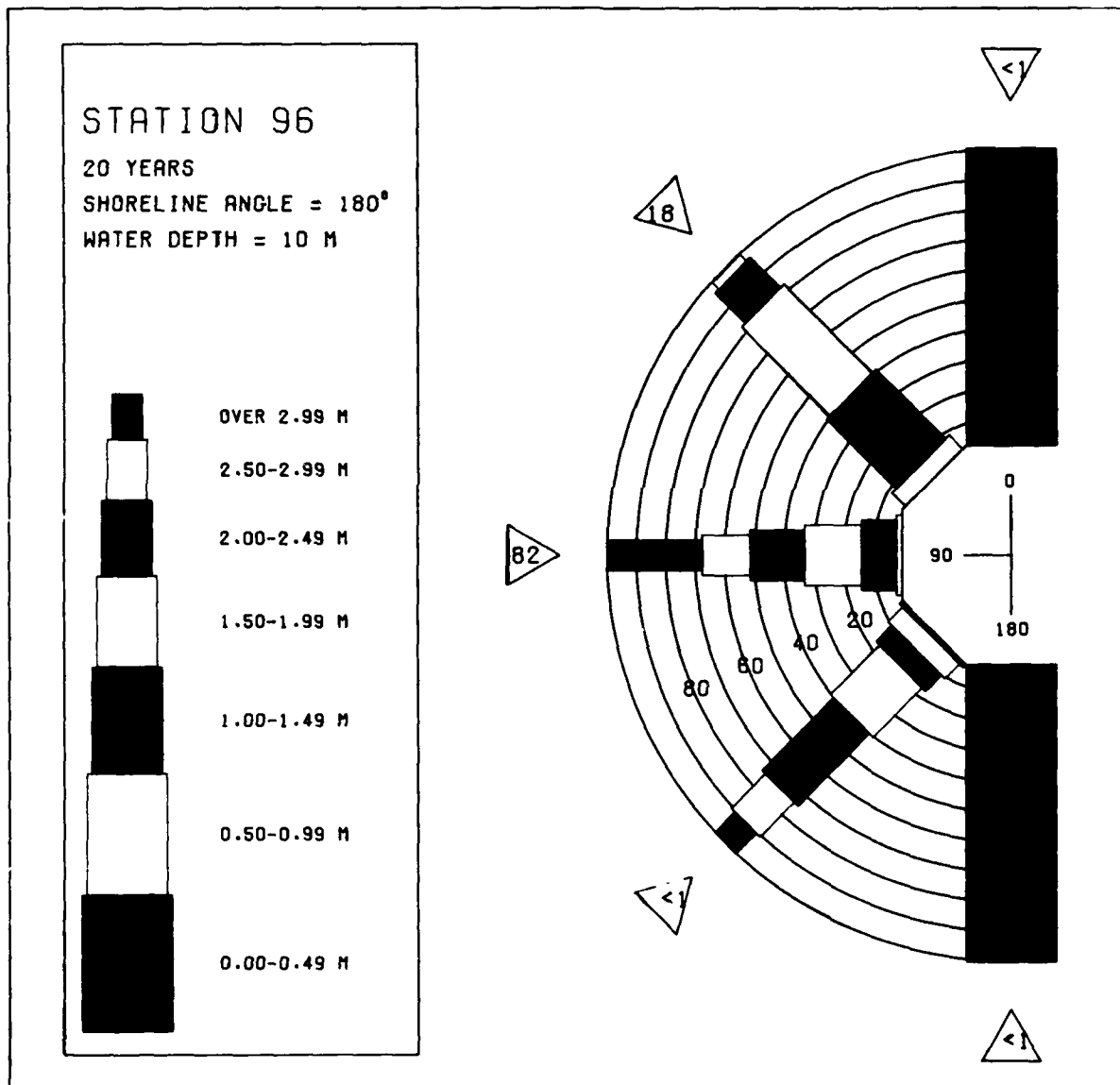
20 YR. STATISTICS FOR PACIFIC STATION 95 (38.31N/ 123.08W TO 38.20N/ 122.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.9
MEAN PEAK WAVE PERIOD	(SECONDS)	6.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.6
LARGEST WAVE HS	(METERS)	1.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	7.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	12
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012012

PHASE 3 ST. 96 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 38.20N/122.96W LAT. LONG. END = 38.08N/122.96W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	222	95	109	25	9	7	3	1	1	1	26
0.50-0.99	128	40	46	30	19	47	41	7	3	3	155
1.00-1.49	84	156	148	250	491	227	104	17	3	1	133
1.50-1.99	4	196	160	284	579	442	188	34	3	1	76
2.00-2.49	..	40	25	80	397	626	359	134	2	1	108
2.50-2.99	..	..	1	23	124	521	350	507	1	1	65
3.00-3.49	..	..	..	2	36	309	250	37	..	..	50
3.50-3.99	..	..	..	..	2	41	174	145	..	..	19
4.00-4.49	..	..	..	..	..	..	108	6	..	..	7
4.50-4.99	..	..	..	..	..	..	20	1	..	..	2
5.00+	..	..	..	..	..	..	1	..	..	..	1
TOTAL	240	1315	1231	1235	1840	2356	1454	281	12	0	58440

MEAN HS(M) = 2.47 LARGEST HS(M) = 7.01 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 96 (38.20N/ 122.96W TO 38.08N/ 122.96W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1957	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1958	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1959	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1960	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1961	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1962	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1963	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1964	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1965	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1966	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1967	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1968	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1969	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1970	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1971	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1972	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1973	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1974	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1975	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
MEAN	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 96 (38.20N/ 122.96W TO 38.08N/ 122.96W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1957	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1958	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1959	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1960	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1961	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1962	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1963	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1964	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1965	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1966	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1967	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1968	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1969	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1970	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1971	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1972	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1973	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1974	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5
1975	3.3	3.4	3.0	2.6	2.0	1.8	1.7	1.5	1.6	2.2	3.0	3.4	2.5

20 YR. STATISTICS FOR PACIFIC STATION 96 (38.20N/ 122.96W TO 38.08N/ 122.96W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PERIOD	(SECONDS)	9.1
HIGHEST FREQUENCY	(PERCENT)	9.1
STANDARD DEVIATION OF WAVE HEIGHT	(METERS)	0.1
STANDARD DEVIATION OF WAVE PERIOD	(SECONDS)	0.1
LARGEST WAVE	(METERS)	1.5
PERIOD ASSOCIATED WITH LARGEST WAVE	(SECONDS)	9.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	(DEGREES)	64012000

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 14.9
 LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49											16
0.50 - 0.99	111	15	30								353
1.00 - 1.49	1007	212	196	6							3190
1.50 - 1.99	1475	1981	776	8							7469
2.00 - 2.49	54	2905	773	56	1						3789
2.50 - 2.99		484	477	73	1						1034
3.00 - 3.49		42	155	13							211
3.50 - 3.99			23	10							33
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	2648	10849	2430	166	2	0	0	0	0	0	9415

MEAN HS(M) = 1.83 LARGEST HS(M) = 3.94 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 9415

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 38.08N/122.96W LAT. LON. END= 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49											21
0.50 - 0.99	133	337	750	171	66						1421
1.00 - 1.49	133	337	750	171	66						1421
1.50 - 1.99	140	799	3306	2416	1519	337					1421
2.00 - 2.49	61	860	3080	3177	4438	337					1421
2.50 - 2.99		433	410	385	1538	337					1421
3.00 - 3.49		102	90	29	37	140					1421
3.50 - 3.99			5	5	1	1					1421
4.00 - 4.49											1421
4.50 - 4.99											1421
5.00 +											1421
TOTAL	267	3359	8938	11318	17827	23376	14542	2863	149	0	48317

MEAN HS(M) = 2.73 LARGEST HS(M) = 6.98 MEAN TP(SEC) = 11.7 NUMBER OF CASES = 48317

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 38.08N/122.96W LAT. LON. END = 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	.	34	8	32	.	.	.	.	.	0
1.00 - 0.99	1	.	23	2	100	.	.	.	.	.	147
1.50 - 1.49	3	2	20	22	75	.	.	.	.	.	280
2.00 - 1.99	.	1	20	55	42	2	.	.	.	.	178
2.50 - 2.49	.	.	11	17	25	21	6	.	.	.	128
3.00 - 2.99	.	.	3	3	3	11	10	.	.	.	44
3.50 - 3.49	.	.	.	.	.	6	.	.	.	.	16
4.00 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.49	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	12	128	284	225	278	152	27	0	0	0	659

MEAN HS(M) = 2.20 LARGEST HS(M) = 4.80 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 659

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 38.08N/122.96W LAT. LON. END = 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	1	1	13	.	.	.	.	.	.	.	15
1.00 - 0.99	3	6	.	.	.	.	.	.	.	.	9
1.50 - 1.49	5	29	11	.	.	.	.	.	.	.	45
2.00 - 1.99	.	1	1	.	.	.	.	.	.	.	2
2.50 - 2.49	.	.	.	.	.	.	.	.	.	.	0
3.00 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.49	.	.	.	.	.	.	.	.	.	.	0
4.00 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.49	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9	38	25	0	0	0	0	0	0	0	46

MEAN HS(M) = 1.45 LARGEST HS(M) = 2.10 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 46

PHASE 3 ST. 97 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 38.08N/122.96W LAT. LON. END = 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

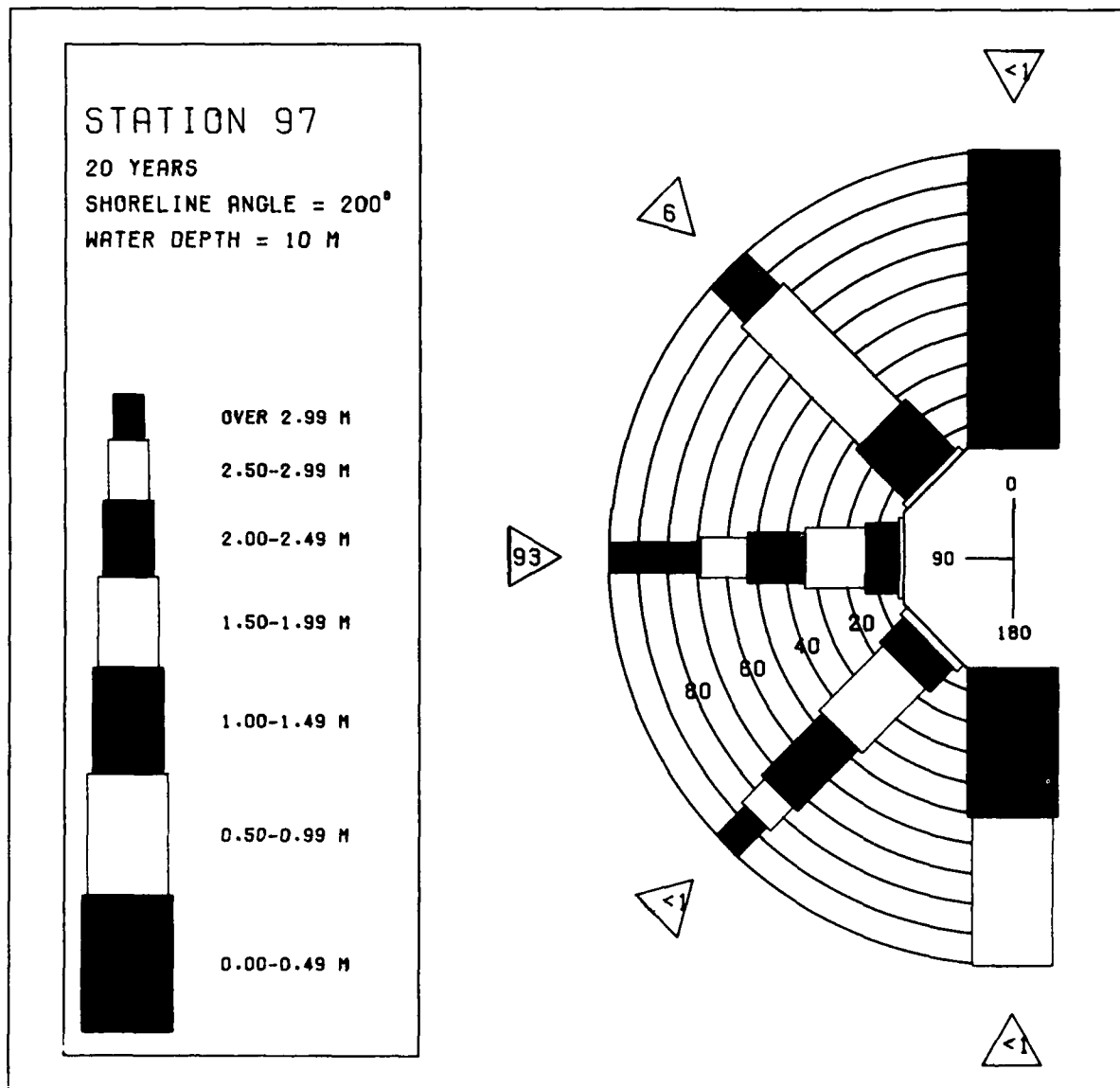
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.50 - 0.49	0
1.00 - 0.99	0
1.50 - 1.49	0
2.00 - 1.99	0
2.50 - 2.49	0
3.00 - 2.99	0
3.50 - 3.49	0
4.00 - 3.99	0
4.50 - 4.49	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 97 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 38.08N/122.96W LAT. LONG. END= 38.00N/123.01W
 SHORELINE ANGLE = 200.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	12	55	82	17	6	4	2	1	1	1	178
0.50-0.99	106	287	362	244	155	34	11	7	1	1	1189
1.00-1.49	162	602	387	434	437	234	33	11	1	1	2266
1.50-1.99	11	383	181	327	546	385	95	33	1	1	1933
2.00-2.49	..	15	91	104	447	388	152	33	1	1	1488
2.50-2.99	..	..	47	31	158	169	216	33	1	1	1050
3.00-3.49	..	..	12	8	42	161	268	33	1	1	710
3.50-3.99	..	..	1	2	13	161	241	33	1	1	446
4.00-4.49	..	..	..	..	3	14	216	33	1	1	299
4.50-4.99	..	..	..	..	..	1	226	33	1	1	593
5.00-5.49	..	..	..	..	..	..	152	33	1	1	..
5.50-5.99	..	..	..	..	..	..	283	12	0	0	..
TOTAL	291	1435	1165	1167	1806	2351	1450	283	12	0	58440

MEAN HS(M) = 2.58 LARGEST HS(M) = 6.98 MEAN TP(SEC) = 10.9 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 97 (38.08N/ 122.96W TO 38.00N/ 123.01W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	3.4	3.5	3.1	2.7	2.1	2.0	1.8	1.7	1.7	2.3	3.1	3.5	
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991													
1992													
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
2016													
2017													
2018													
2019													
2020													

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 97 (38.08N/ 122.96W TO 38.00N/ 123.01W)

YEAR	MONTH												LARGEST
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1976													
1977													
1978													
1979													
1980													
1981													
1982													
1983													
1984													
1985													
1986													
1987													
1988													
1989													
1990													
1991													
1992													
1993													
1994													
1995													
1996													
1997													
1998													
1999													
2000													
2001													
2002													
2003													
2004													
2005													
2006													
2007													
2008													
2009													
2010													
2011													
2012													
2013													
2014													
2015													
2016													
2017													
2018													
2019													
2020													

20 YR. STATISTICS FOR PACIFIC STATION 97 (38.08N/ 122.96W TO 38.00N/ 123.01W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	1.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	1.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	1.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		64012000

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	10920	.	.	.	.	.	.	.	.	.	10920
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 - 5.49	0
5.5 - 5.99	0
TOTAL	10920	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.34 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 6382

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	7935	13624	7421	186	.	.	.	.	.	.	28866
0.5 - 0.99	177	3685	1464	.	.	.	.	.	.	.	5912
1.0 - 1.49	3	479	95	.	.	.	.	.	.	.	751
1.5 - 1.99	.	59	8	.	.	.	.	.	.	.	70
2.0 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.5 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.0 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.5 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.0 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.5 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.0 - 5.49	.	.	.	.	.	.	.	.	.	.	0
5.5 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8578	17847	8988	186	0	0	0	0	0	0	0

MEAN HS(M) = 0.37 LARGEST HS(M) = 1.88 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 20808

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	896	106	97	4450	3879	1947	275	95	27	.	11772
0.5 - 0.99	629	694	256	1042	2130	3985	2253	213	3	.	11205
1.0 - 1.49	468	1160	266	94	171	385	475	176	.	.	3195
1.5 - 1.99	138	896	388	85	35	83	73	41	.	.	1739
2.0 - 2.49	5	450	388	116	22	17	18	.	.	.	1016
2.5 - 2.99	.	59	284	100	13	5	3	.	.	.	464
3.0 - 3.49	.	3	66	37	11	3	3	.	.	.	123
3.5 - 3.99	.	.	11	15	22	5	.	.	.	.	53
4.0 - 4.49	.	.	3	5	3	6	.	.	.	.	17
4.5 - 4.99	.	.	.	.	11	1	.	.	.	.	12
5.0 - 5.49	.	.	.	.	.	.	.	.	.	.	0
5.5 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2136	3368	1759	5944	6297	6437	3100	525	30	0	0

MEAN HS(M) = 0.79 LARGEST HS(M) = 4.96 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 17314

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	573	80	10	.	.	.	.	.	.	.	627
0.5 - 0.99	581	44	.	.	.	.	.	.	.	.	617
1.0 - 1.49	550	359	1	.	.	.	.	.	.	.	714
1.5 - 1.99	501	200	8	.	.	.	.	.	.	.	585
2.0 - 2.49	102	227	79	3	.	.	.	.	.	.	438
2.5 - 2.99	3	47	10	3	10	.	.	.	.	.	233
3.0 - 3.49	.	1	5	5	20	1	.	.	.	.	26
3.5 - 3.99	.	.	1	3	6	13	.	.	.	.	26
4.0 - 4.49	.	.	.	.	3	6	.	.	.	.	9
4.5 - 4.99	.	.	.	.	1	3	.	.	.	.	4
5.0 - 5.49	.	.	.	.	.	.	.	.	.	.	1
5.5 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2211	616	292	133	41	23	0	0	0	0	0

MEAN HS(M) = 1.36 LARGEST HS(M) = 5.11 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 1950

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	8345	803	11	.	.	.	.	.	.	.	8436
0.50-1.49	1779	3	.	.	.	.	.	.	.	.	1782
1.50-2.49	292	.	.	.	.	.	.	.	.	.	292
2.50-3.49	65	3	.	.	.	.	.	.	.	.	68
3.50-4.49	.	.	.	.	.	.	.	.	.	.	.
4.50-5.49	.	.	.	.	.	.	.	.	.	.	.
5.50+	.	.	.	.	.	.	.	.	.	.	.
TOTAL	10481	87	12	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.30 LARGEST HS(M) = 2.08 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 6186

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.49	0
1.50-2.49	0
2.50-3.49	0
3.50-4.49	0
4.50-5.49	0
5.50+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 98 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 38.00N/123.01W LAT. LON. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.49	0
1.50-2.49	0
2.50-3.49	0
3.50-4.49	0
4.50-5.49	0
5.50+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 98 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 38.00N/123.01W LAT. LONG. END= 38.00N/122.83W
 SHORELINE ANGLE = 90.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)						TOTAL
	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	
0.00-0.49	2837	1385	754	463	387	164	227	181	22	LONGER	6058
0.50-0.99	375	441	172	104	213	398	225	21	17		1949
1.00-1.49	158	169	37	9	17	38	47	14			492
1.50-1.99	50	116	47	6	1	1	1				243
2.00-2.49	10	68	46	14							142
2.50-2.99		10	38	16							66
3.00-3.49			8	6							17
3.50-3.99			1	2							6
4.00-4.49											1
4.50-4.99											1
5.00+											0
TOTAL	3430	2189	1103	622	630	641	307	51	2	0	

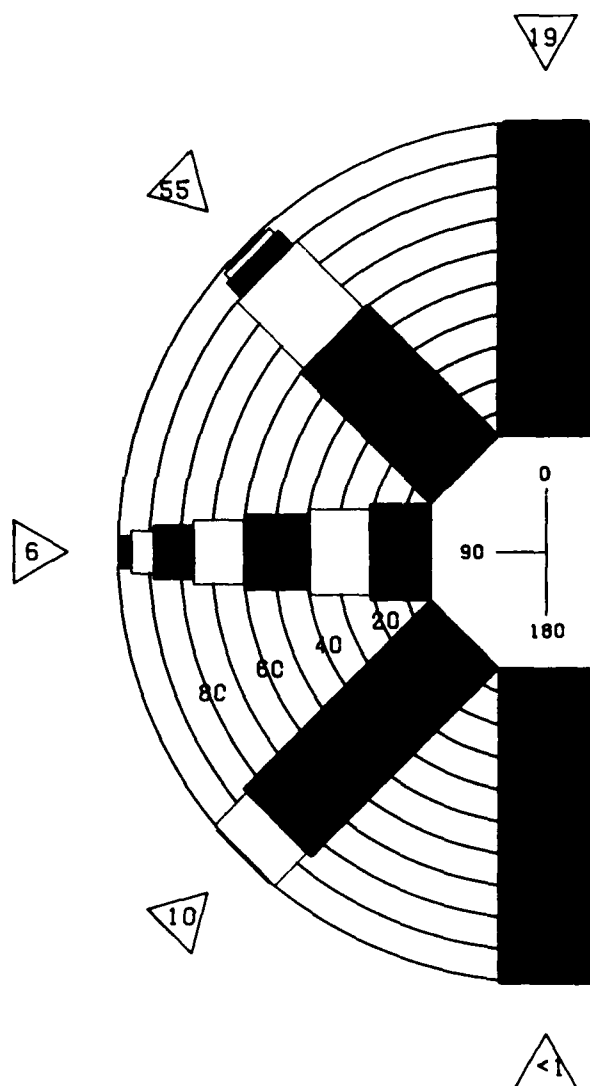
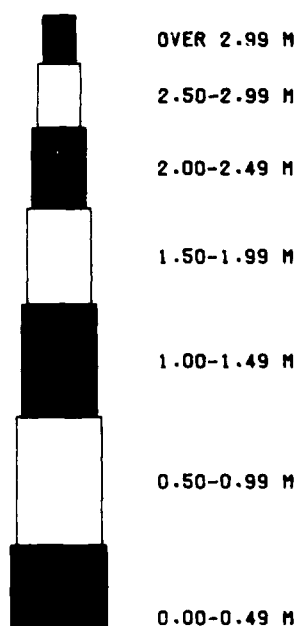
MEAN HS(M) = 0.45 LARGEST HS(M) = 5.11 MEAN TP(SEC) = 7.6 TOTAL CASES = 58440

STATION 98

20 YEARS

SHORELINE ANGLE = 90°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 98 (38.00N/ 123.01W TO 38.00N/ 122.83W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.1	0.7	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
1957	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.9	0.8	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.6	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 98 (38.00N/ 123.01W TO 38.00N/ 122.83W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	3.6	3.3	3.2	3.4	0.7	0.8	0.4	0.6	0.5	2.9	0.8	1.1	
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

20 YR. STATISTICS FOR PACIFIC STATION 98 (38.00N/ 123.01W TO 38.00N/ 122.83W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	7.6
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	5.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021603

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49											0
0.5 - 0.99											0
1.0 - 1.49											0
1.5 - 1.99											0
2.0 - 2.49											0
2.5 - 2.99											0
3.0 - 3.49											0
3.5 - 3.99											0
4.0 - 4.49											0
4.5 - 4.99											0
5.0 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49											0
0.5 - 0.99											0
1.0 - 1.49											0
1.5 - 1.99											0
2.0 - 2.49											0
2.5 - 2.99											0
3.0 - 3.49											0
3.5 - 3.99											0
4.0 - 4.49											0
4.5 - 4.99											0
5.0 +											0
TOTAL	5728	0	0	0	0	0	0	0	0	0	5728

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.19 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 3348

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	12058	6627	1919	462	114	51	30	15			21276
0.5 - 0.99	2587	8418	6117	4467	4190	2104	2227	44			28154
1.0 - 1.49	201	2000	1071	704	1543	3148	1303	42			10012
1.5 - 1.99	15	462	342	179	412	821	1059	104			3394
2.0 - 2.49		39	71	30	143	320	219	68			872
2.5 - 2.99		1	11	5	73	220	136	1			447
3.0 - 3.49				1	5	164	99	13			283
3.5 - 3.99						63	92	10			165
4.0 - 4.49						23	63				86
4.5 - 4.99						1	44				45
5.0 +											0
TOTAL	14861	17547	9531	5848	6480	6897	3272	297	0	0	

MEAN HS(M) = 0.77 LARGEST HS(M) = 4.93 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 37848

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	5810	870	95	105	13	13.3	15.3	18.1	22.2	LONGER	675
0.5 - 0.99	455	10	10	10	10	10	10	10	10	10	1013
1.0 - 1.49	126	10	10	10	10	10	10	10	10	10	1486
1.5 - 1.99	3	10	10	10	10	10	10	10	10	10	1486
2.0 - 2.49		10	10	10	10	10	10	10	10	10	1239
2.5 - 2.99		10	10	10	10	10	10	10	10	10	1239
3.0 - 3.49		10	10	10	10	10	10	10	10	10	1239
3.5 - 3.99		10	10	10	10	10	10	10	10	10	1239
4.0 - 4.49		10	10	10	10	10	10	10	10	10	1239
4.5 - 4.99		10	10	10	10	10	10	10	10	10	1239
5.0 +		10	10	10	10	10	10	10	10	10	1239
TOTAL	1536	2781	1312	533	292	274	307	221	20	0	4272

MEAN HS(M) = 1.71 LARGEST HS(M) = 6.27 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 4272

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
PERIOD(SECONDS)	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	
0.00 - 0.49	816	58	22	.	.	.	.	.	.	.	896
0.50 - 0.99	691	100	10	.	.	.	.	.	.	.	792
1.00 - 1.49	653	195	10	.	.	.	.	.	.	.	858
1.50 - 1.99	246	337	49	.	.	.	.	.	.	.	632
2.00 - 2.49	22	106	78	3	.	.	.	.	.	.	299
2.50 - 2.99	1	34	61	5	.	.	.	.	.	.	101
3.00 - 3.49	.	1	3	1	.	.	.	.	.	.	14
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	4
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	1	.	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2429	926	232	9	1	0	0	0	0	0	

MEAN HS(M) = 1.12 LARGEST HS(M) = 4.85 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 2109

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
PERIOD(SECONDS)	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	
0.00 - 0.49	7132	78	3	.	.	.	.	.	.	.	7213
0.50 - 0.99	862	.	.	.	.	.	.	.	.	.	862
1.00 - 1.49	140	3	.	.	.	.	.	.	.	.	143
1.50 - 1.99	5	.	.	.	.	.	.	.	.	.	8
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8139	84	3	0	0	0	0	0	0	0	

MEAN HS(M) = 0.23 LARGEST HS(M) = 1.69 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 4809

PHASE 3 ST. 99 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

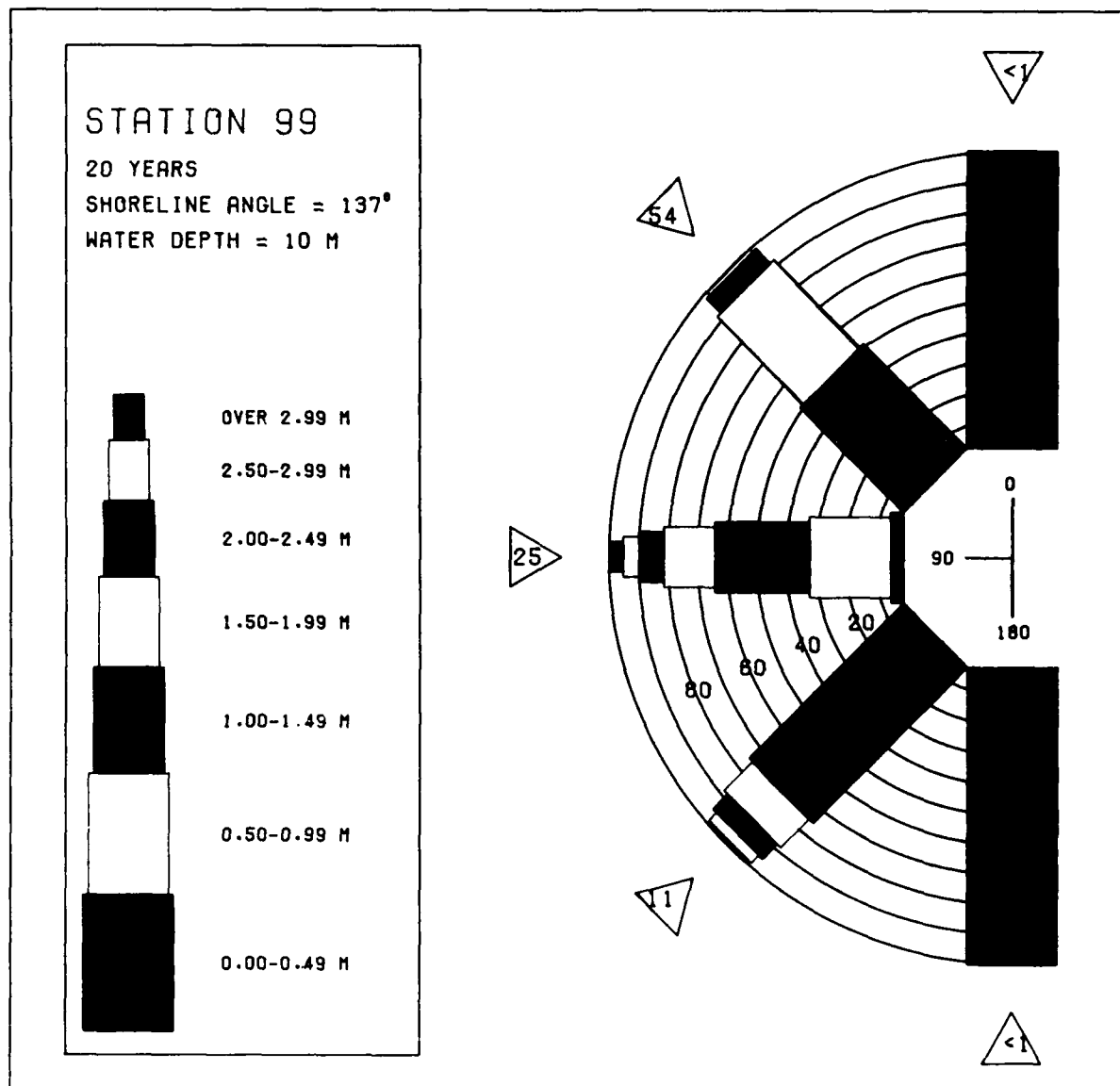
HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
PERIOD(SECONDS)	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 99 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 38.00N/122.83W LAT. LON. END= 37.88N/122.71W
 SHORELINE ANGLE = 137.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	2631	683	195	46	11	5	3	1	1	1	3576
0.50-0.99	459	900	816	447	420	210	22	4	5	5	3078
1.00-1.49	136	305	119	74	159	317	132	16	1	1	1247
1.50-1.99	39	152	65	22	46	90	116	14	1	1	546
2.00-2.49	2	75	48	15	19	35	29	1	1	1	237
2.50-2.99	1	15	43	18	10	25	19	1	1	1	135
3.00-3.49	1	1	17	9	4	18	11	1	1	1	62
3.50-3.99	1	1	1	3	2	8	7	1	1	1	26
4.00-4.49	1	1	1	1	1	4	1	1	1	1	13
4.50-4.99	1	1	1	1	1	1	1	1	1	1	4
5.00+	1	1	1	1	1	1	1	1	1	1	0
TOTAL	3267	2131	1104	635	672	712	354	48	1	0	58440

MEAN HS(M) = 0.69 LARGEST HS(M) = 6.27 MEAN TP(SEC) = 7.8 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 99 (38.00N/ 122.83W TO 37.88N/ 122.71W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.6	1.0	0.9	0.7	0.7	0.6	0.4	0.5	0.4	0.7	0.3	0.6	0.7
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	1.2	1.1	1.0	0.8	0.7	0.6	0.5	0.5	0.5	0.6	0.8	1.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 99 (38.00N/ 122.83W TO 37.88N/ 122.71W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

20 YR. STATISTICS FOR PACIFIC STATION 99 (38.00N/ 122.83W TO 37.88N/ 122.71W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PERIOD	(SECONDS)	6.7
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60-70
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.4
LARGEST WAVE HS	(METERS)	1.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	7.6
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	63
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		1975,12,11,12

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	10920	.	.	.	.	.	.	.	.	.	10920
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	10920	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.34 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 6382

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	7635	13624	7421	186	.	.	.	.	.	.	28866
0.50 - 0.99	763	3685	1464	.	.	.	.	.	.	.	5912
1.00 - 1.49	177	479	95	.	.	.	.	.	.	.	751
1.50 - 1.99	3	59	8	.	.	.	.	.	.	.	70
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	8578	17847	8988	186	0	0	0	0	0	0	0

MEAN HS(M) = 0.37 LARGEST HS(M) = 1.88 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 20808

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	966	112	99	4450	3879	1947	275	95	27	.	11850
0.50 - 0.99	674	711	256	1042	2130	1947	275	213	3	.	11267
1.00 - 1.49	532	1165	270	94	171	385	475	176	.	.	3268
1.50 - 1.99	148	949	407	88	35	85	77	41	.	.	1830
2.00 - 2.49	5	480	408	118	22	18	18	.	.	.	1069
2.50 - 2.99	.	68	311	114	18	3	3	.	.	.	517
3.00 - 3.49	.	3	68	37	11	3	3	.	.	.	125
3.50 - 3.99	.	.	11	15	22	6	.	.	.	.	54
4.00 - 4.49	.	.	3	5	8	1	.	.	.	.	22
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	9
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2325	3488	1833	5963	6302	6441	3104	525	30	0	0

MEAN HS(M) = 0.80 LARGEST HS(M) = 4.96 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 17557

PHASE 3 ST. 100 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 37.88N/122.71W LAT. LON. END= 37.88N/122.63W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	3139	119	22	.	.	.	.	.	.	.	3280
0.50 - 0.99	1266	25	1	.	.	.	.	.	.	.	1292
1.00 - 1.49	609	20	0	.	.	.	.	.	.	.	629
1.50 - 1.99	234	20	0	.	.	.	.	.	.	.	254
2.00 - 2.49	41	25	0	.	.	.	.	.	.	.	66
2.50 - 2.99	.	6	0	.	.	.	.	.	.	.	6
3.00 - 3.49	.	6	0	.	.	.	.	.	.	.	6
3.50 - 3.99	.	10	0	.	.	.	.	.	.	.	10
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5289	576	235	116	40	20	0	0	0	0	0

MEAN HS(M) = 0.78 LARGEST HS(M) = 5.01 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 3678

PHASE 3 ST. 100 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 37.88N/122.71W LAT. LONG. END= 37.88N/122.63W
 SHORELINE ANGLE = 90.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.00-0.49	2713	1386	754	463	1187	1343	1543	181	222	LONGER		5935
0.50-0.99	170	442	172	104	213	398	225	21				1845
1.00-1.49	131	170	37	99	17	38	47	17				456
1.50-1.99	38	69	47	14	3	1	1					238
2.00-2.49			1	2								131
2.50-2.99												66
3.00-3.49												14
3.50-3.99												7
4.00-4.49												1
4.50-4.99												0
TOTAL	3156	2190	1103	623	631	642	307	51	2	0		58440

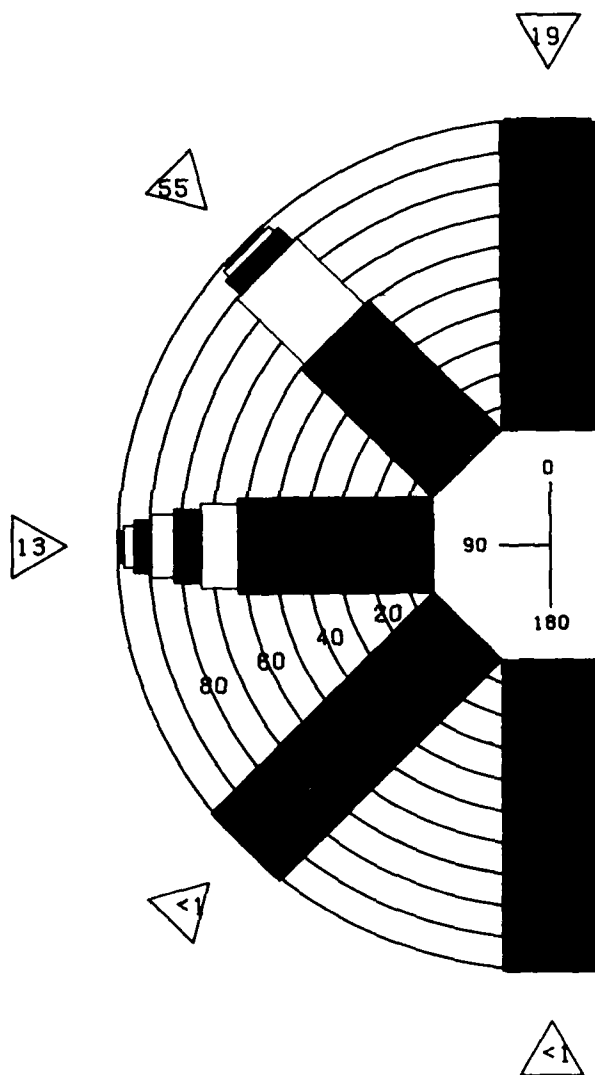
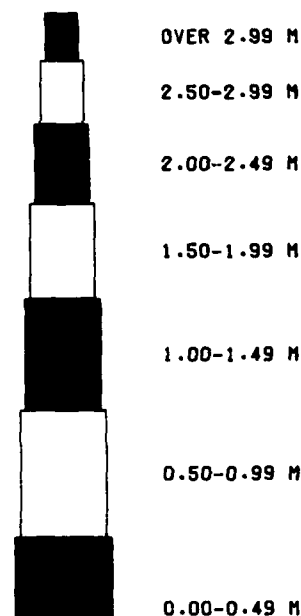
MEAN HS(M) = 0.43 LARGEST HS(M) = 5.01 MEAN TP(SEC) = 6.8 TOTAL CASES = 58440

STATION 100

20 YEARS

SHORELINE ANGLE = 90°

WATER DEPTH = 10 M



PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	134	168	81	.	.	.	.	.	.	.	15143
0.50 - 0.99	4211	16295	179	.	.	.	.	.	.	.	106135
1.00 - 1.49	646	1929	.	.	.	.	.	.	.	.	28134
1.50 - 1.99	17	190	.	.	.	.	.	.	.	.	2150
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	18344	10035	220	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.51 LARGEST HS(M) = 2.42 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 16716

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	191	607	699	126	54	37	20	11	6	.	1751
0.50 - 0.99	270	3299	6868	4603	3295	1112	109	34	13	.	19603
1.00 - 1.49	160	1247	2080	1817	3276	3933	1066	111	13	.	13693
1.50 - 1.99	73	995	679	542	1403	2857	1827	159	11	.	8546
2.00 - 2.49	1	172	188	152	574	1949	1356	280	17	.	4689
2.50 - 2.99	.	34	53	23	183	983	1214	160	.	.	2650
3.00 - 3.49	.	.	3	1	22	367	917	140	1	.	1464
3.50 - 3.99	.	.	.	.	.	92	400	99	10	.	605
4.00 - 4.49	.	.	.	1	.	23	154	77	1	.	255
4.50 - 4.99	.	.	.	.	.	.	39	70	.	.	110
5.00 +	.	.	.	.	.	.	15	25	.	.	40
TOTAL	695	6357	10583	7266	8807	11353	7117	1166	62	0	0

MEAN HS(M) = 1.38 LARGEST HS(M) = 5.95 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 31233

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	497	47	6	.	.	.	.	.	.	.	551
0.50 - 0.99	347	237	25	5	6	.	.	.	.	.	620
1.00 - 1.49	253	574	11	11	10	.	.	.	.	.	908
1.50 - 1.99	135	497	34	34	20	.	.	.	.	.	856
2.00 - 2.49	3	383	157	95	15	.	.	.	.	.	801
2.50 - 2.99	.	154	139	157	37	20	11	.	.	.	698
3.00 - 3.49	.	73	135	95	34	18	.	1	.	.	364
3.50 - 3.99	.	8	94	32	29	15	6	.	.	.	184
4.00 - 4.49	.	.	39	17	15	20	6	.	.	.	98
4.50 - 4.99	.	.	3	5	8	8	.	.	.	.	24
5.00 +	.	.	.	.	6	9	.	.	.	.	11
TOTAL	1235	1974	1127	452	173	122	31	0	1	0	0

MEAN HS(M) = 1.84 LARGEST HS(M) = 6.19 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 3008

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0. - 0.49	1921	1060	135	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	2040
0.50 - 0.99	860	54	3	.	.	.	.	.	.	.	894
1.00 - 1.49	410	58	3	.	.	.	.	.	.	.	471
1.50 - 1.99	112	171	11	.	.	.	.	.	.	.	264
2.00 - 2.49	17	22	33	.	.	.	.	.	.	.	137
2.50 - 2.99	.	8	11	.	.	.	.	.	.	.	33
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	8
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3320	496	61	0	0	0	0	0	0	0	

MEAN HS(M) = 0.69 LARGEST HS(M) = 3.45 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 2271

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0. - 0.49	2140	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	2140
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	2140	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.26 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 1251

PHASE 3 ST. 101 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

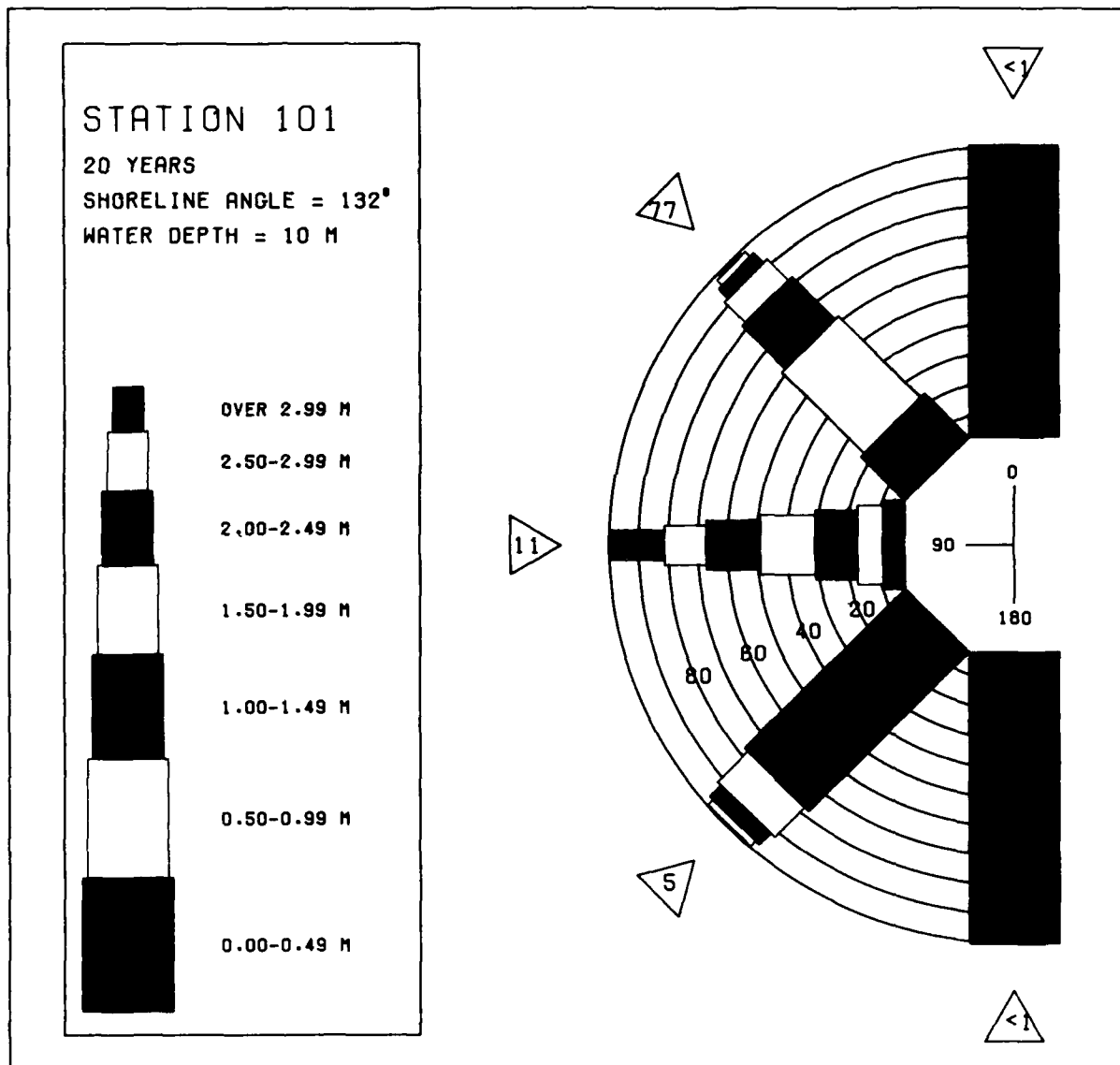
HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0. - 0.49	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 101 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 37.88N/122.63W LAT. LON. END= 37.81N/122.53W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.1	6.1-8.1	8.1-9.6	9.6-10.6	10.6-11.8	11.8-13.4	13.4-15.4	15.4-18.2	18.2-22.3	22.3-LONGER	TOTAL
OVER 3.99	18	32	70	102	116	113	102	181	222	1	2160
3.50-3.99	14	29	70	102	116	113	102	181	222	1	2160
3.00-3.49	14	29	70	102	116	113	102	181	222	1	2160
2.50-2.99	14	29	70	102	116	113	102	181	222	1	2160
2.00-2.49	14	29	70	102	116	113	102	181	222	1	2160
1.50-1.99	14	29	70	102	116	113	102	181	222	1	2160
1.00-1.49	14	29	70	102	116	113	102	181	222	1	2160
0.50-0.99	14	29	70	102	116	113	102	181	222	1	2160
0.00-0.49	14	29	70	102	116	113	102	181	222	1	2160
TOTAL	2572	1883	1195	766	893	1142	709	113	4	0	58440

MEAN HS(M) = 1.01 LARGEST HS(M) = 6.19 MEAN TP(SEC) = 8.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 101 (37.88N/ 122.63W TO 37.81N/ 122.53W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1957	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1958	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1959	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1960	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1961	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1962	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1963	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1964	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1965	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1966	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1967	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1968	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1969	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1970	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1971	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1972	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1973	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1974	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
1975	1.2	1.4	1.1	1.0	0.9	0.8	0.6	0.6	0.6	0.8	1.0	1.5	0.9
MEAN	1.8	1.6	1.3	1.0	0.9	0.8	0.7	0.6	0.6	0.9	1.1	1.7	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 101 (37.88N/ 122.63W TO 37.81N/ 122.53W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1957	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1958	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1959	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1960	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1961	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1962	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1963	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1964	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1965	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1966	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1967	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1968	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1969	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1970	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1971	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1972	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1973	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1974	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8
1975	3.7	4.1	3.2	2.4	1.8	1.8	1.0	1.2	1.2	3.3	2.7	3.8

20 YR. STATISTICS FOR PACIFIC STATION101 (37.88N/ 122.63W TO 37.81N/ 122.53W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.0
MEAN PEAK WAVE PERIOD	(SECONDS)	6.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	60
STANDARD DEVIATION OF WAVE HS	(METERS)	0.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.0
LARGEST WAVE HS	(METERS)	1.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	94
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		63013121

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)					TOTAL	
	6.0	8.0	9.5	10.5	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	
0.0	0
0.1	0
0.2	0
0.3	0
0.4	0
0.5	0
0.6	0
0.7	0
0.8	0
0.9	0
1.0	0
1.1	0
1.2	0
1.3	0
1.4	0
1.5	0
1.6	0
1.7	0
1.8	0
1.9	0
2.0	0
2.1	0
2.2	0
2.3	0
2.4	0
2.5	0
2.6	0
2.7	0
2.8	0
2.9	0
3.0	0
3.1	0
3.2	0
3.3	0
3.4	0
3.5	0
3.6	0
3.7	0
3.8	0
3.9	0
4.0	0
4.1	0
4.2	0
4.3	0
4.4	0
4.5	0
4.6	0
4.7	0
4.8	0
4.9	0
5.0	0
5.1	0
5.2	0
5.3	.	.	.								

[illegible]

HEIGHT(METERS)	PERIOD(SECONDS)					TOTAL					
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00	0	0	0	0	0	0	0	0	0	0	1124
0.50	902	184	102	15	1	1	0	0	0	0	1197
1.00	771	284	297	45	10	5	0	0	0	0	1316
1.50	465	113	284	307	84	136	0	0	0	0	1109
2.00	251	393	206	374	328	31	1	0	0	0	7950
2.50	5	126	621	1201	1694	2007	5	0	0	0	5043
3.00		35	124	328	1694	2157	1	0	0	0	2650
3.50		6	13	30	44	157	0	0	0	0	1267
4.00					167	108	0	0	0	0	490
4.50					42	44	0	0	0	0	61
5.00						61	0	0	0	0	10
TOTAL	2294	7525	11734	8854	10271	9372	10	0	0	0	
MEAN HS(M) = 1.78	LARGEST HS(M) = 5.15		MEAN TP(SEC) = 9.8		NUMBER OF CASES = 29272						

HEIGHT(METERS)	PERIOD(SECONDS)								TOTAL		
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	1	0	0	0	0	0	0	0	0	0	98
0.5	1	10	34	22	13	8	0	0	0	0	98
1.0	1	162	1170	117	41	138	37	0	0	0	229
1.5	1	136	1014	264	312	916	219	23	0	0	1700
2.0	1	154	1374	433	229	750	906	68	0	0	2678
2.5	1	148	183	287	111	102	497	107	0	0	1408
3.0	1	68	160	174	25	81	866	224	0	0	1438
3.5	1	17	92	66	25	123	392	330	0	0	1148
4.0	1	1	17	13	6	213	491	301	0	0	1033
4.5	1	1	10	5	1	448	486	222	0	0	1033
5.0	1	1	1	1	1	100	731	323	0	0	1144
5.5	1	1	1	1	1	13	1067	1262	0	0	1560
6.0	1	1	1	1	1	1	1	1	0	0	6
TOTAL	53	596	3054	5182	7786	14013	14700	3009	180	0	28412

MEAN HS(M) = 2.59 LARGEST HS(M) = 7.01 MEAN TP(SEC) = 12.5 NUMBER OF CASES = 28412

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6-11.7 11.8-13.3 13.4-15.3 15.4-18.1 18.2-22.2 22.3- LONGER	TOTAL
0.0-0.49	5	3	1	1	1	5
0.5-0.99	3	6	10	15	1	77
1.0-1.49	22	56	53	32	5	150
1.5-1.99	5	92	97	22	1	230
2.0-2.49	..	73	99	11	..	246
2.5-2.99	..	29	47	17	10	154
3.0-3.49	..	3	44	13	11	94
3.5-3.99	..	..	23	10	5	58
4.0-4.49	..	..	8	3	8	19
4.5-4.99	..	..	..	..	3	3
5.00+	41	310	382	190	78	622
TOTAL	41	310	382	190	78	622

MEAN HS(M) = 2.65 LARGEST HS(M) = 5.77 MEAN TP(SEC) = 8.7 NUMBER OF CASES = 622

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6-11.7 11.8-13.3 13.4-15.3 15.4-18.1 18.2-22.2 22.3- LONGER	TOTAL
0.0-0.49	41	3	..	..	..	41
0.5-0.99	11	3	..	..	..	14
1.0-1.49	11	5	..	..	..	12
1.5-1.99	3	..	..	..	..	8
2.0-2.49	..	1	..	..	..	1
2.5-2.99	..	..	..	..	..	0
3.0-3.49	..	..	..	..	..	0
3.5-3.99	..	..	..	..	..	0
4.0-4.49	..	..	..	..	..	0
4.5-4.99	..	..	..	..	..	0
5.00+	66	10	0	0	0	0
TOTAL	66	10	0	0	0	0

MEAN HS(M) = 0.67 LARGEST HS(M) = 2.60 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 47

PHASE 3 ST. 102 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 37.81N/122.53W LAT. LON. END= 37.66N/122.50W
 SHORELINE ANGLE = 171.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS) 10.6-11.7 11.8-13.3 13.4-15.3 15.4-18.1 18.2-22.2 22.3- LONGER	TOTAL
0.0-0.49	8	..	..	..	..	8
0.5-0.99	..	..	..	..	..	0
1.0-1.49	..	..	..	..	..	0
1.5-1.99	..	..	..	..	..	0
2.0-2.49	..	..	..	..	..	0
2.5-2.99	..	..	..	..	..	0
3.0-3.49	..	..	..	..	..	0
3.5-3.99	..	..	..	..	..	0
4.0-4.49	..	..	..	..	..	0
4.5-4.99	..	..	..	..	..	0
5.00+	8	0	0	0	0	0
TOTAL	8	0	0	0	0	0

MEAN HS(M) = 0.03 LARGEST HS(M) = 0.05 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 5

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 102 (37.81N/ 122.53W TO 37.66N/ 122.50W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1957	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1958	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1959	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1960	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1961	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1962	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1963	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1964	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1965	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1966	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1967	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1968	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1969	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1970	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1971	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1972	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1973	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1974	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
1975	2.4	3.0	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	2.1
MEAN	3.1	3.2	2.7	2.3	1.7	1.5	1.3	1.1	1.4	2.0	2.8	3.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 102 (37.81N/ 122.53W TO 37.66N/ 122.50W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1957	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1958	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1959	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1960	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1961	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1962	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1963	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1964	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1965	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1966	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1967	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1968	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1969	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1970	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1971	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1972	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1973	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1974	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
1975	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

20 YR. STATISTICS FOR PACIFIC STATION102 (37.81N/ 122.53W TO 37.66N/ 122.50W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	11.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	60-90
STANDARD DEVIATION OF WAVE HS	(METERS)	1.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	4.0
LARGEST WAVE HS	(METERS)	16.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	7.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	70
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022409

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 37.66N/122.50W LAT. LON. END = 37.58N/122.51W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD (SECONDS)					TOTAL
	6.0	8.0	9.5	10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0 - 0.49	.	.	.	.	.	.	.	.	.	0
0.5 - 0.99	.	.	.	.	.	.	.	.	.	6
1.0 - 1.49	5	3	3	15	8	.	.	.	.	116
1.5 - 1.99	17	58	30	34	18	6	.	.	.	194
2.0 - 2.49	6	37	82	46	34	11	.	.	.	236
2.5 - 2.99	.	78	61	27	23	20	1	.	.	159
3.0 - 3.49	.	13	53	39	13	15	8	.	.	126
3.5 - 3.99	.	.	20	15	5	3	.	.	.	59
4.0 - 4.49	.	.	8	1	.	.	.	.	.	18
4.5 - 4.99	.	.	.	.	.	.	.	.	.	7
5.0 - 5.49	.	.	.	.	.	.	.	.	.	1
5.5 - 5.99	.	.	.	.	.	.	.	.	.	.
TOTAL	28	224	292	182	111	73	12	0	0	0

MEAN HS(M) = 2.40 LARGEST HS(M) = 5.49 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 552

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 37.66N/122.50W LAT. LON. END = 37.58N/122.51W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD (SECONDS)					TOTAL
	6.0	8.0	9.5	10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0 - 0.49	1
0.5 - 0.99	6
1.0 - 1.49	20
1.5 - 1.99	16
2.0 - 2.49	1
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 - 5.49	0
5.5 - 5.99	0
TOTAL	14	30	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.35 LARGEST HS(M) = 2.03 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 28

PHASE 3 ST. 103 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 37.66N/122.50W LAT. LON. END = 37.58N/122.51W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD (SECONDS)					TOTAL
	6.0	8.0	9.5	10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER
0.0 - 0.49	0
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 - 5.49	0
5.5 - 5.99	0
TOTAL	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 103 (37.66N/ 122.50W TO 37.58N/ 122.51W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	3.3	3.4	2.8	2.5	1.8	1.7	1.4	1.3	1.5	2.1	2.9	3.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 103 (37.66N/ 122.50W TO 37.58N/ 122.51W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

20 YR. STATISTICS FOR PACIFIC STATION103 (37.66N/ 122.50W TO 37.58N/ 122.51W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.9
LARGEST WAVE HS	(METERS)	10.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	8.9
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	64.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		2100

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 37.58N/122.51W LAT. LON. END = 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 37.58N/122.51W LAT. LON. END = 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	37	.	.	.	.	.	.	.	.	.	37
1.00 - 1.49	15	.	.	.	.	.	.	.	.	.	15
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	53	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.94 LARGEST HS(M) = 1.37 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 32

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 37.58N/122.51W LAT. LON. END = 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	6	0	0	0	0	0	0	0	0	0	6
0.50 - 0.99	103	10	10	10	10	10	10	10	10	10	103
1.00 - 1.49	103	10	10	10	10	10	10	10	10	10	103
1.50 - 1.99	103	10	10	10	10	10	10	10	10	10	103
2.00 - 2.49	103	10	10	10	10	10	10	10	10	10	103
2.50 - 2.99	103	10	10	10	10	10	10	10	10	10	103
3.00 - 3.49	103	10	10	10	10	10	10	10	10	10	103
3.50 - 3.99	103	10	10	10	10	10	10	10	10	10	103
4.00 - 4.49	103	10	10	10	10	10	10	10	10	10	103
4.50 - 4.99	103	10	10	10	10	10	10	10	10	10	103
5.00 +	103	10	10	10	10	10	10	10	10	10	103
TOTAL	2654	8986	11803	7561	2238	185	5	1	0	0	0

MEAN HS(M) = 1.57 LARGEST HS(M) = 4.66 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 19551

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 37.58N/122.51W LAT. LON. END = 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	1	1	1	1	1	1	1	1	1	1	1
0.50 - 0.99	1	1	1	1	1	1	1	1	1	1	1
1.00 - 1.49	1	1	1	1	1	1	1	1	1	1	1
1.50 - 1.99	1	1	1	1	1	1	1	1	1	1	1
2.00 - 2.49	1	1	1	1	1	1	1	1	1	1	1
2.50 - 2.99	1	1	1	1	1	1	1	1	1	1	1
3.00 - 3.49	1	1	1	1	1	1	1	1	1	1	1
3.50 - 3.99	1	1	1	1	1	1	1	1	1	1	1
4.00 - 4.49	1	1	1	1	1	1	1	1	1	1	1
4.50 - 4.99	1	1	1	1	1	1	1	1	1	1	1
5.00 +	1	1	1	1	1	1	1	1	1	1	1
TOTAL	44	516	2565	5967	15550	23101	14645	2954	156	0	0

MEAN HS(M) = 2.72 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 12.4 NUMBER OF CASES = 38300

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	1	.	.	.	.	.	.	.	1
1.00 - 1.49	13	54	5	17	1	5	.	.	.	136	
1.50 - 1.99	5	44	59	23	22	1	.	.	.	194	
2.00 - 2.49	.	59	85	37	22	.	.	.	.	203
2.50 - 2.99	.	22	51	49	20	18	.	.	.	160	
3.00 - 3.49	.	1	34	15	17	6	.	.	.	35	
3.50 - 3.99	.	.	6	.	8	3	.	.	.	41	
4.00 - 4.49	.	.	.	.	.	.	.	.	.	14
4.50 - 4.99	.	.	.	.	.	.	.	.	.	3
TOTAL	19	249	323	174	90	46	0	0	0	541	

MEAN HS(M) = 2.67 LARGEST HS(M) = 5.77 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 541

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	.	.	.	.	.	.	.	.	.	0
0.50 - 0.99	1	1	.	.	.	.	.	.	.	1
1.00 - 1.49	8	8	.	.	.	.	.	.	.	14
1.50 - 1.99	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	0
TOTAL	15	9	0	0	0	0	0	0	0	16	

MEAN HS(M) = 1.46 LARGEST HS(M) = 1.86 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 16

PHASE 3 ST. 104 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 37.58N/122.51W LAT. LON. END= 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	0	
0.50 - 0.99	0	
1.00 - 1.49	0	
1.50 - 1.99	0	
2.00 - 2.49	0	
2.50 - 2.99	0	
3.00 - 3.49	0	
3.50 - 3.99	0	
4.00 - 4.49	0	
4.50 - 4.99	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 104 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 37.50N/122.51W LAT. LONG. END = 37.50N/122.48W
 SHORELINE ANGLE = 177.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	1	6	6	70	22	10	3	1	1	..	13
0.50-0.99	23	211	266	485	275	81	8	5	1	..	584
1.00-1.49	105	370	533	1077	723	205	54	10	..	..	1711
1.50-1.99	130	188	303	1087	212	509	130	100	..	..	1009
2.00-2.49	18	129	110	233	281	458	178	33	..	..	277
2.50-2.99	..	20	2	2	90	276	338	33	..	..	222
3.00-3.49	..	..	..	..	30	106	151	38	..	..	100
3.50-3.99	..	..	..	..	9	25	95	27	..	..	83
4.00-4.49	..	..	..	..	..	4	136	37	..	..	147
4.50-4.99	..	..	..	..	..	..	1	1	..	..	2
5.00+	..	..	..	..	..	..	..	..	..	..	78
TOTAL	277	975	1465	1367	1785	2330	1461	291	11	0	58440

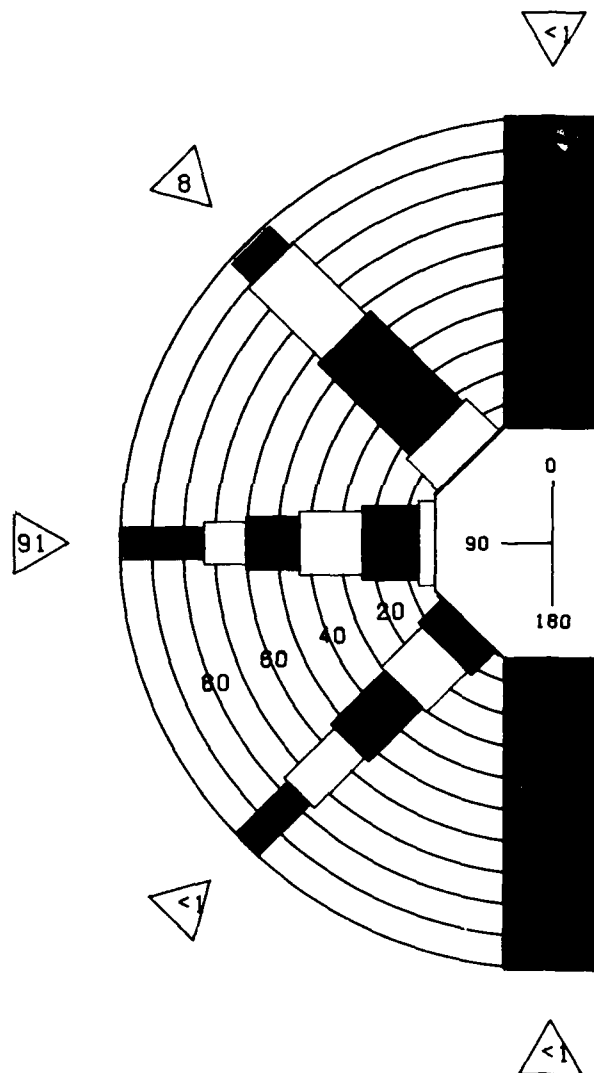
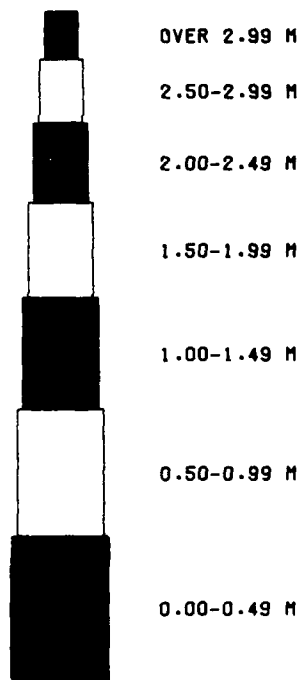
MEAN HS(M) = 2.34 LARGEST HS(M) = 7.00 MEAN TP(SEC) = 11.0 TOTAL CASES = 58440

STATION 104

20 YEARS

SHORELINE ANGLE = 177°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 104 (37.58N/ 122.51W TO 37.50N/ 122.48W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1955	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1956	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1957	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1958	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1959	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1960	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1961	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1962	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1963	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1964	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1965	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1966	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1967	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1968	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1969	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1970	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1971	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1972	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1973	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1974	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
1975	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5
MEAN	3.2	3.3	2.8	2.5	1.9	1.7	1.5	1.3	1.5	2.1	2.9	3.3	2.5

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 104 (37.58N/ 122.51W TO 37.50N/ 122.48W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1955	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1956	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1957	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1958	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1959	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1960	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1961	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1962	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1963	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1964	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1965	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1966	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1967	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1968	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1969	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1970	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1971	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1972	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1973	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1974	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
1975	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5
MEAN	4.5	5.8	6.2	5.1	4.7	3.2	2.4	2.6	2.8	3.3	3.9	4.2	3.5

20 YR. STATISTICS FOR PACIFIC STATION104 (37.58N/ 122.51W TO 37.50N/ 122.48W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	3.3
MEAN PEAK WAVE PERIOD	(SECONDS)	11.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	6.2
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022409

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LONG. START = 37.50N/122.48W LAT. LONG. END = 37.38N/122.41W
 SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LONG. START = 37.50N/122.48W LAT. LONG. END = 37.38N/122.41W
 SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	475	323	1	.	.	.	.	.	.	.	799
0.50 - 0.99	2263	1759	.	.	.	.	.	.	.	.	4022
1.00 - 1.49	735	1998	10	.	.	.	.	.	.	.	2743
1.50 - 1.99	1	165	1	.	.	.	.	.	.	.	167
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3477	4250	12	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.39 LARGEST HS(M) = 2.44 MEAN TP(SEC) = 6.2 NUMBER OF CASES = 4527

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LONG. START = 37.50N/122.48W LAT. LONG. END = 37.38N/122.41W
 SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	5	51	95	111	53	135	29	11	.	.	166
0.50 - 0.99	44	1714	3220	1110	515	135	29	11	.	.	6778
1.00 - 1.49	73	2433	6593	4916	3737	1411	227	35	.	.	19430
1.50 - 1.99	102	1603	2707	4062	5903	3357	746	53	.	.	18533
2.00 - 2.49	11	1088	852	1408	4863	5804	1408	119	.	.	15563
2.50 - 2.99	.	285	414	285	1540	5142	2186	183	.	.	10035
3.00 - 3.49	.	13	111	68	458	3218	2474	203	.	.	6545
3.50 - 3.99	.	.	23	10	124	1327	2450	212	.	.	4147
4.00 - 4.49	.	.	3	1	17	337	1878	232	.	.	2468
4.50 - 4.99	.	.	.	.	.	68	847	297	.	.	1212
5.00 +	.	.	.	.	.	5	325	713	.	.	1043
TOTAL	235	7188	14028	11871	17160	20805	12570	2058	5	0	0

MEAN HS(M) = 2.13 LARGEST HS(M) = 7.04 MEAN TP(SEC) = 11.2 NUMBER OF CASES = 50230

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LONG. START = 37.50N/122.48W LAT. LONG. END = 37.38N/122.41W
 SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	.	10	6	13	15	17	5	.	1	.	0
0.50 - 0.99	.	402	71	47	150	145	35	.	1	.	17
1.00 - 1.49	29	1025	109	63	173	145	35	.	1	.	168
1.50 - 1.99	11	97	107	83	119	304	135	14	10	.	1002
2.00 - 2.49	.	22	154	71	119	339	215	65	17	.	1002
2.50 - 2.99	.	.	90	47	63	162	215	95	5	.	657
3.00 - 3.49	.	.	5	11	23	71	176	51	5	.	306
3.50 - 3.99	.	.	.	.	.	23	165	47	1	.	254
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	48	376	661	421	681	1405	1408	414	90	0	3239

MEAN HS(M) = 3.08 LARGEST HS(M) = 6.57 MEAN TP(SEC) = 12.2 NUMBER OF CASES = 3239

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
 SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49										0	
0.50 - 0.99	1									1	
1.00 - 1.49	1	6								7	
1.50 - 1.99	20	49	22							91	
2.00 - 2.49	3	58	61							122	
2.50 - 2.99		77	59	13	3					152	
3.00 - 3.49		20	90	39	5					152	
3.50 - 3.99		5	88	46	11					144	
4.00 - 4.49			15	20	6					52	
4.50 - 4.99			5	3	3					14	
5.00 +										3	
TOTAL	25	215	340	121	26	11	0	0	0	440	

MEAN HS(M) = 2.98 LARGEST HS(M) = 5.21 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 440

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
 SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49										0	
0.50 - 0.99										0	
1.00 - 1.49										0	
1.50 - 1.99										0	
2.00 - 2.49										0	
2.50 - 2.99										0	
3.00 - 3.49										0	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 105 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 37.50N/122.48W LAT. LON. END= 37.38N/122.41W
 SHORELINE ANGLE = 152.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49										0	
0.50 - 0.99										0	
1.00 - 1.49										0	
1.50 - 1.99										0	
2.00 - 2.49										0	
2.50 - 2.99										0	
3.00 - 3.49										0	
3.50 - 3.99										0	
4.00 - 4.49										0	
4.50 - 4.99										0	
5.00 +										0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 105 (37.50N/ 122.48W TO 37.38N/ 122.41W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1976	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1977	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1978	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1979	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1980	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1981	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1982	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1983	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1984	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1985	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1986	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1987	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1988	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1989	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1990	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1991	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1992	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1993	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1994	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1995	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1996	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1997	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1998	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
1999	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2000	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2001	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2002	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2003	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2004	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2005	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2006	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2007	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2008	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2009	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2010	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2011	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2012	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2013	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2014	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2015	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2016	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2017	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2018	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2019	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	
2020	3.0	3.1	2.6	2.2	1.7	1.6	1.4	1.3	1.3	1.9	2.6	3.1	

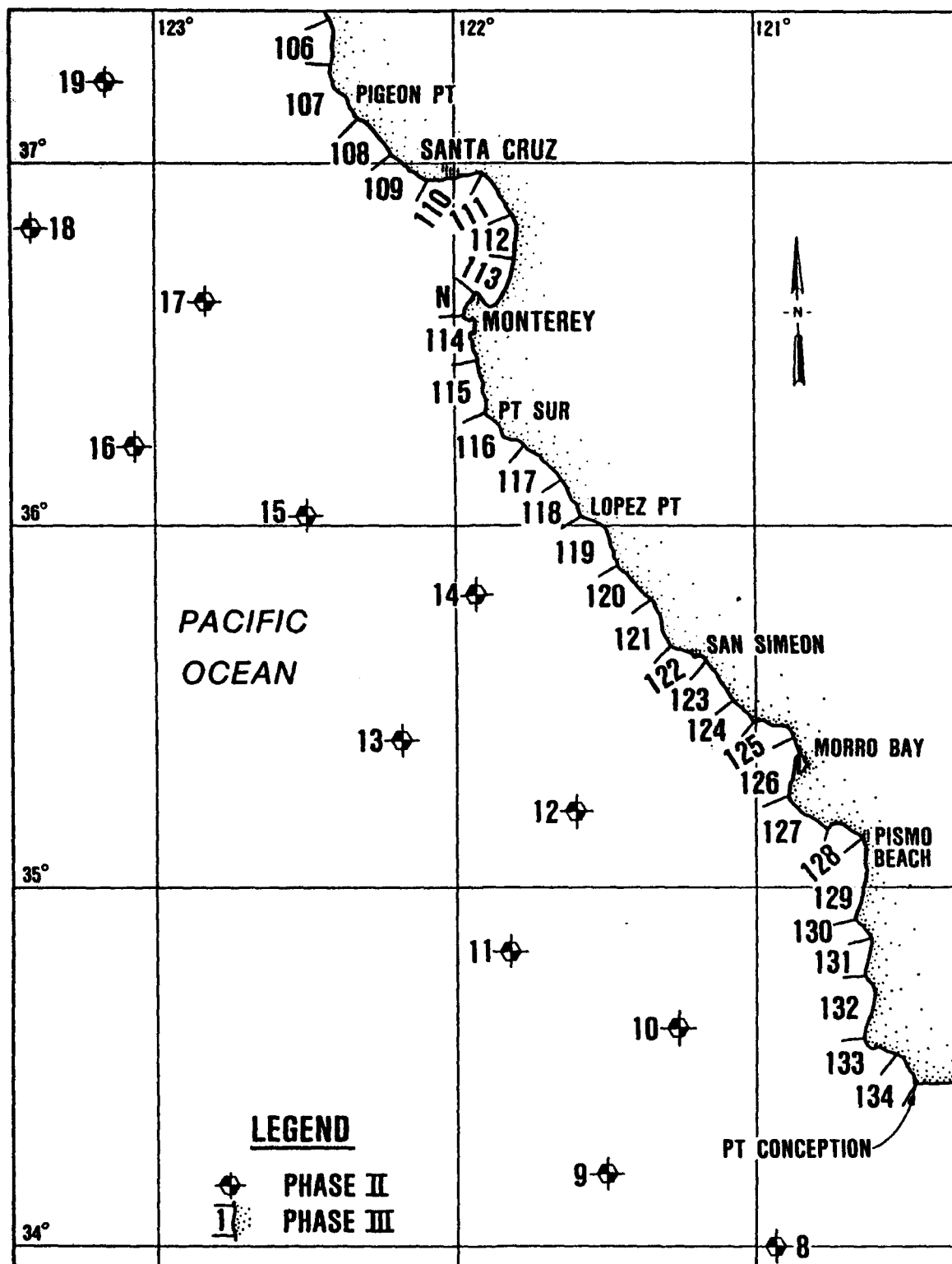
LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 105 (37.50N/ 122.48W TO 37.38N/ 122.41W)

YEAR	MONTH												LARGEST HS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1976	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1977	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1978	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1979	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1980	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1981	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1982	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1983	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1984	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1985	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1986	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1987	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1988	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1989	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1990	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1991	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1992	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1993	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1994	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1995	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1996	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1997	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1998	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
1999	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2000	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2001	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2002	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2003	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2004	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2005	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2006	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2007	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2008	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2009	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2010	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2011	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2012	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2013	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2014	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2015	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2016	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2017	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2018	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2019	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
2020	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	

20 YR. STATISTICS FOR PACIFIC STATION105 (37.50N/ 122.48W TO 37.38N/ 122.41W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	7.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	74.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022406

Appendix E: Sta 106 through 134



PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
 SHORELINE ANGLE= 180.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
 SHORELINE ANGLE= 180.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	8
0.50-0.99	34	.	.	.	.	.	.	.	.	.	34
1.00-1.49	398	.	.	.	.	.	.	.	.	.	498
1.50-1.99	42	32	.	.	.	.	.	.	.	.	74
2.00-2.49	.	.	.	.	.	.	.	.	.	.	0
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	462	102	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.27 LARGEST HS(M) = 1.79 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 343

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
 SHORELINE ANGLE= 180.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	5	20	3	.	.	.	.	.	.	.	29
0.50-0.99	123	1096	1189	126	37	1	10	.	.	.	2582
1.00-1.49	1107	2529	4010	905	189	29	1	.	.	.	8770
1.50-1.99	2135	3709	3922	876	244	46	34	.	.	.	9966
2.00-2.49	121	2672	1158	477	236	85	3	.	.	.	4752
2.50-2.99	.	701	598	335	181	70	3	.	.	.	1688
3.00-3.49	.	123	215	99	116	70	1	.	.	.	624
3.50-3.99	.	.	53	15	70	49	8	.	.	.	196
4.00-4.49	.	.	.	.	27	18	1	.	.	.	47
4.50-4.99	.	.	.	.	1	3	.	.	.	.	4
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3491	10851	10148	2834	1102	371	61	0	0	0	0

MEAN HS(M) = 1.71 LARGEST HS(M) = 4.75 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 16880

PHASE 3 ST. 106 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 37.38N/122.41W LAT. LON. END= 37.26N/122.41W
 SHORELINE ANGLE= 180.0 (DEG. AZ.) WATER DEPTH= 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	1
0.50-0.99	1	120	577	250	179	58	26	.	.	.	1189
1.00-1.49	18	147	1010	250	455	107	22	.	.	.	1660
1.50-1.99	9	111	1010	206	455	107	22	.	.	.	1660
2.00-2.49	.	27	147	120	181	70	3	.	.	.	475
2.50-2.99	.	.	53	15	70	49	8	.	.	.	196
3.00-3.49	.	.	.	.	27	18	1	.	.	.	47
3.50-3.99	.	.	.	.	1	3	.	.	.	.	4
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	24	624	3819	9199	16948	22238	14025	2514	120	0	0

MEAN HS(M) = 2.77 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 40646

PHASE 3 ST. 106 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 37.32N/122.41W LAT. LONG. END = 37.26N/122.41W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	2	2	4	13	5	3	.	.	.	5
0.50-0.99	16	124	176	40	195	52	4	.	.	.	377
1.00-1.49	151	1278	1563	343	195	52	4	.	.	.	1589
1.50-1.99	221	3928	324	437	482	225	45	3	.	.	2200
2.00-2.49	13	285	154	258	536	416	101	6	.	.	1772
2.50-2.99	.	85	79	102	387	541	154	13	3	.	1362
3.00-3.49	.	15	42	26	135	495	209	23	1	.	946
3.50-3.99	.	.	13	11	47	322	248	31	2	.	674
4.00-4.49	.	.	2	3	15	150	236	23	.	.	429
4.50-4.99	.	.	.	1	1	46	213	21	.	.	284
5.00-5.49	.	.	.	.	.	8	101	12	.	.	322
TOTAL	402	1181	1425	1221	1811	2260	1404	247	9	0	

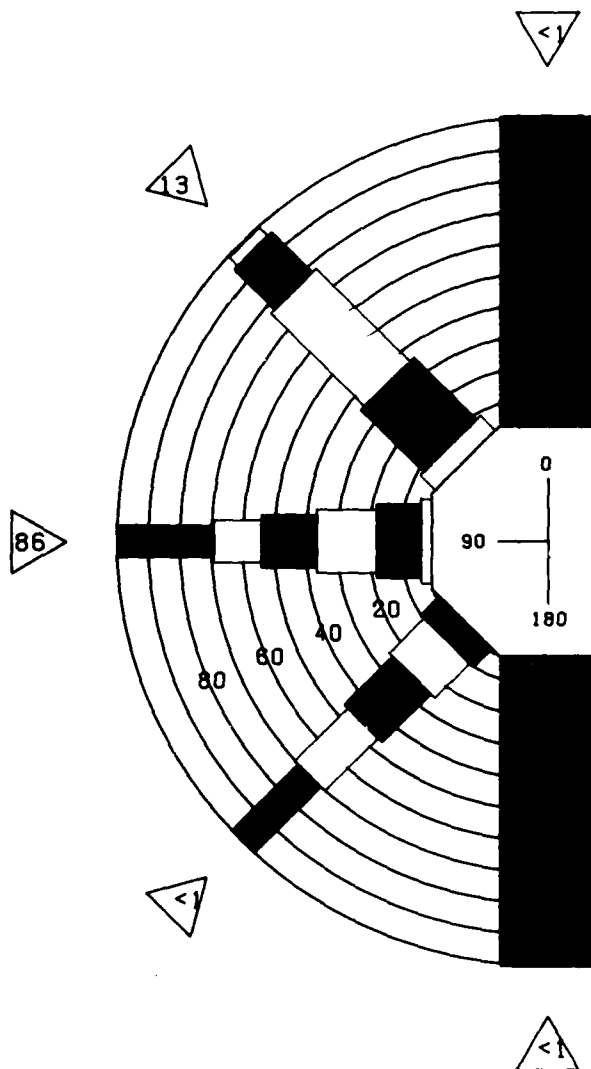
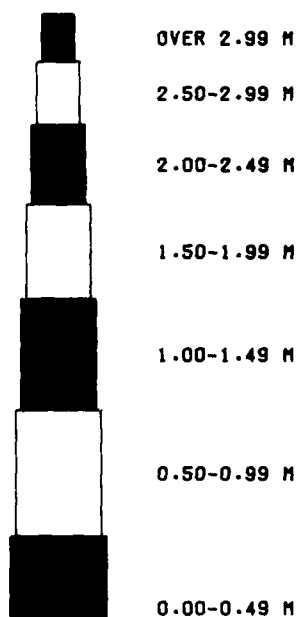
MEAN HS(M) = 2.46 LARGEST HS(M) = 7.27 MEAN TP(SEC) = 10.8 TOTAL CASES = 58440

STATION 106

20 YEARS

SHORELINE ANGLE = 180°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 106 (37.38N/ 122.41W TO 37.26N/ 122.41W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
1975	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1976	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1977	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1978	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1979	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1980	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1981	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1982	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1983	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1984	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1985	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1986	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
1987	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4
MEAN	3.4	3.5	2.9	2.6	2.0	1.8	1.6	1.5	1.6	2.2	3.0	3.5	2.4

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 106 (37.38N/ 122.41W TO 37.26N/ 122.41W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
1975	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1976	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1977	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1978	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1979	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1980	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1981	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1982	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1983	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1984	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1985	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1986	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9
1987	4.7	5.3	5.3	4.9	4.3	3.6	3.3	3.8	4.1	3.3	4.0	3.9	3.9

20 YR. STATISTICS FOR PACIFIC STATION 106 (37.38N/ 122.41W TO 37.26N/ 122.41W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.5
MEAN WAVE PERIOD	(SECONDS)	10.5
MEAN WAVE DIRECTION	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HEIGHT	(METERS)	1.1
LARGEST WAVE HEIGHT	(METERS)	5.3
WAVE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	1.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022412

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	1
0.50-0.99	400	213	.	.	.	.	.	.	.	.	612
1.00-1.49	2224	1286	1	.	.	.	.	.	.	.	3681
1.50-1.99	823	1983	.	.	.	.	.	.	.	.	2806
2.00-2.49	.	186	.	.	.	.	.	.	.	.	186
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3447	3839	1	0	0	0	0	0	0	0	4261

MEAN HS(M) = 1.43 LARGEST HS(M) = 2.53 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 4261

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	5	47	87	3	3	1	.	.	.	.	146
0.50-0.99	56	1709	2979	1002	438	116	29	11	.	.	6340
1.00-1.49	92	2537	6517	4727	3514	1288	196	17	.	.	18891
1.50-1.99	152	1752	2888	4168	5701	3100	675	29	3	.	18466
2.00-2.49	11	1196	912	1505	5000	5477	1326	92	.	.	15519
2.50-2.99	.	302	407	335	1702	5150	2010	143	.	.	10049
3.00-3.49	.	20	140	78	497	3374	2354	177	.	.	6640
3.50-3.99	.	.	18	13	148	1459	2369	154	.	.	4161
4.00-4.49	.	.	6	1	27	398	1955	215	.	.	2602
4.50-4.99	.	.	.	.	.	82	982	253	.	.	1322
5.00+	.	.	.	.	.	6	391	686	.	.	1083
TOTAL	316	7563	13954	11832	17030	20451	12287	1782	4	0	49824

MEAN HS(M) = 2.16 LARGEST HS(M) = 6.95 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 49824

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.50-0.99	.	11	13	10	20	18	11	17	1	.	90
1.00-1.49	2	14	10	10	170	180	149	17	.	.	490
1.50-1.99	10	80	100	104	1332	1800	189	143	1	.	3717
2.00-2.49	.	20	140	80	1200	1800	189	143	1	.	3717
2.50-2.99	.	.	37	13	200	1800	189	143	1	.	3717
3.00-3.49	.	.	.	1	5	1800	189	143	1	.	3717
3.50-3.99	.	.	.	.	.	1800	189	143	1	.	3717
4.00-4.49	.	.	.	.	.	1800	189	143	1	.	3717
4.50-4.99	.	.	.	.	.	1800	189	143	1	.	3717
5.00+	.	.	.	.	.	1800	189	143	1	.	3717
TOTAL	42	336	629	438	816	1812	1713	654	90	0	3864

MEAN HS(M) = 3.10 LARGEST HS(M) = 7.11 MEAN TP(SEC) = 12.5 NUMBER OF CASES = 3864

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 37.26N/122.41W LAT. LON. END = 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	.	.	5	.	.	.	.	.	.	.	5
1.0-1.49	1	1	22	.	.	.	.	.	.	.	27
1.5-1.99	1	4	50	.	.	.	.	.	.	.	56
2.0-2.49	5	58	73	8	3	.	.	.	.	.	170
2.5-2.99	.	3	87	51	.	.	.	.	.	.	166
3.0-3.49	.	3	95	47	.	1	.	.	.	.	151
3.5-3.99	.	.	23	27	.	5	.	.	.	.	56
4.0-4.49	.	.	8	5	.	.	.	.	.	.	23
4.5-5.00	.	.	.	.	.	.	.	.	.	.	5
5.00+	.	.	.	.	.	.	.	.	.	.	.
TOTAL	17	224	377	138	37	14	0	0	0	0	481

MEAN HS(M) = 3.01 LARGEST HS(M) = 5.20 MEAN TP(SEC) = 8.6 NUMBER OF CASES = 481

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 37.26N/122.41W LAT. LON. END = 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	.	.	.	.	.	.	.	.	.	.	0
0.5-0.99	1	.	.	.	.	.	.	.	.	.	10
1.0-1.49	.	.	.	.	.	.	.	.	.	.	7
1.5-1.99	6	1	.	.	.	.	.	.	.	.	7
2.0-2.49	.	1	.	.	.	.	.	.	.	.	2
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-5.00	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	7	6	0	0	0	0	0	0	0	0	10

MEAN HS(M) = 1.99 LARGEST HS(M) = 3.01 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 10

PHASE 3 ST. 107 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 37.26N/122.41W LAT. LON. END = 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

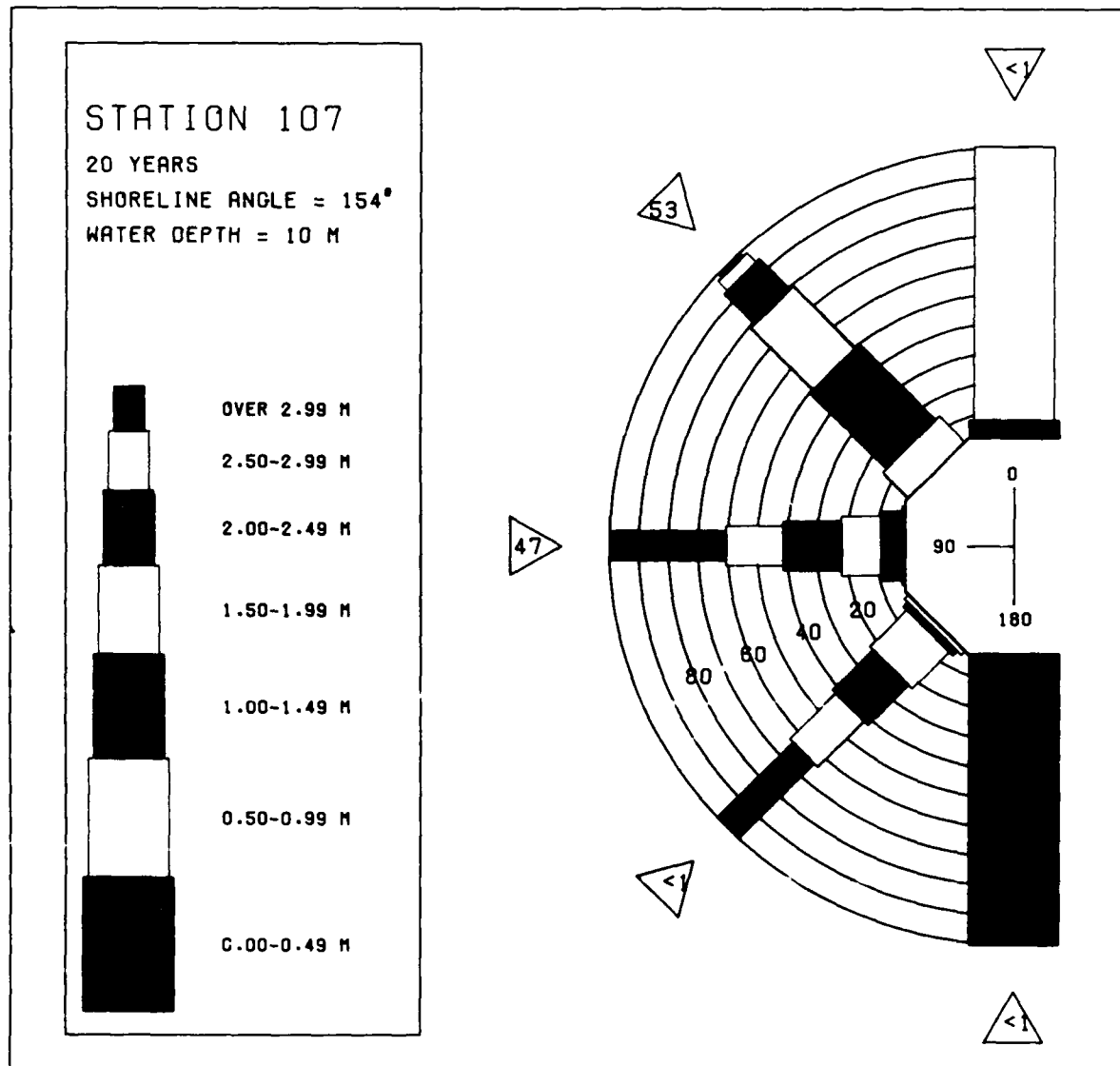
HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-5.00	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 107 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 37.26N/122.41W LAT. LON. END= 37.11N/122.31W
 SHORELINE ANGLE = 154.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	45	193	299	100	43	11	1	1	1	1	12
0.5-0.99	332	404	660	474	353	130	20	1	1	1	694
1.0-1.49	102	387	600	422	287	130	20	1	1	1	2276
1.5-1.99	2	152	277	161	103	59	1	1	1	1	2204
2.0-2.49	..	48	16	10	2	1	1	1	1	1	1700
2.5-2.99	..	..	1	1	1	1	1	1	1	1	1141
3.0-3.49	..	..	..	..	..	..	..	..	..	..	788
3.5-3.99	..	..	..	..	..	..	..	..	..	..	509
4.0-4.49	..	..	..	..	..	..	..	..	..	..	360
4.5-4.99	..	..	..	..	..	..	..	..	..	..	169
5.0-5.49	..	..	..	..	..	..	..	..	..	..	144
TOTAL	381	1194	1492	1238	1784	2223	1396	243	6	0	58440

MEAN HS(M) = 2.17 LARGEST HS(M) = 7.11 MEAN TP(SEC) = 10.8 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION107 (37.26N/ 122.41W TO 37.11N/ 122.31W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	16.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	60.00
STANDARD DEVIATION OF WAVE HS	(METERS)	1.00
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HATED WITH LARGEST WAVE HS	(METERS)	18.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	78.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)	(DATE, TIME)	5702206

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LONG. START = 37.11N/122.31W LAT. LONG. END = 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.5	18	0	0	0	0	0	0	0	0	0	18
0.5-1.0	0	0	0	0	0	0	0	0	0	0	0
1.0-1.5	0	0	0	0	0	0	0	0	0	0	0
1.5-2.0	0	0	0	0	0	0	0	0	0	0	0
2.0-2.5	0	0	0	0	0	0	0	0	0	0	0
2.5-3.0	0	0	0	0	0	0	0	0	0	0	0
3.0-3.5	0	0	0	0	0	0	0	0	0	0	0
3.5-4.0	0	0	0	0	0	0	0	0	0	0	0
4.0-4.5	0	0	0	0	0	0	0	0	0	0	0
4.5-5.0	0	0	0	0	0	0	0	0	0	0	0
5.0-5.5	0	0	0	0	0	0	0	0	0	0	0
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	18	0	0	0	0	0	0	0	0	0	18

MEAN HS(M) = 0.19 LARGEST HS(M) = 0.29 MEAN TP(SEC) = 5.0 NUMBER OF CASES = 11

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LONG. START = 37.11N/122.31W LAT. LONG. END = 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.5	163	205	37	0	0	0	0	0	0	0	404
0.5-1.0	213	357	319	0	0	0	0	0	0	0	604
1.0-1.5	226	445	266	0	0	0	0	0	0	0	691
1.5-2.0	145	158	70	0	0	0	0	0	0	0	180
2.0-2.5	0	5	3	0	0	0	0	0	0	0	55
2.5-3.0	0	0	0	0	0	0	0	0	0	0	0
3.0-3.5	0	0	0	0	0	0	0	0	0	0	0
3.5-4.0	0	0	0	0	0	0	0	0	0	0	0
4.0-4.5	0	0	0	0	0	0	0	0	0	0	0
4.5-5.0	0	0	0	0	0	0	0	0	0	0	0
5.0-5.5	0	0	0	0	0	0	0	0	0	0	0
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4680	9970	703	0	0	0	0	0	0	0	8977

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.71 MEAN TP(SEC) = 6.6 NUMBER OF CASES = 8977

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LONG. START = 37.11N/122.31W LAT. LONG. END = 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.5	13	78	441	56	58	15	20	27	11	0	669
0.5-1.0	13	1206	7323	3256	1899	641	85	27	11	0	14471
1.0-1.5	533	913	4861	5600	7130	3475	643	53	23	0	22714
1.5-2.0	75	913	1331	1516	5427	6842	1865	177	6	0	18152
2.0-2.5	3	533	658	335	1522	2552	2756	263	8	0	11984
2.5-3.0	0	109	207	107	302	2393	2256	338	3	0	6715
3.0-3.5	0	22	66	27	106	2716	2409	359	10	0	3715
3.5-4.0	0	1	15	11	27	227	1062	321	13	0	1677
4.0-4.5	0	0	0	3	1	6	342	354	5	0	800
4.5-5.0	0	0	0	0	0	6	106	160	0	0	276
5.0-5.5	0	0	0	0	0	0	39	99	0	0	138
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	144	3742	14902	10911	16528	20261	12593	2151	79	0	47541

MEAN HS(M) = 1.73 LARGEST HS(M) = 6.26 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 47541

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LONG. START = 37.11N/122.31W LAT. LONG. END = 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.5	1	0	3	0	0	0	0	0	0	0	4
0.5-1.0	6	70	147	5	0	0	0	0	0	0	92
1.0-1.5	66	155	128	30	39	29	0	0	0	0	332
1.5-2.0	6	184	177	63	41	22	0	0	0	0	501
2.0-2.5	0	68	135	104	30	37	0	0	0	0	498
2.5-3.0	0	0	63	15	6	46	0	0	0	0	601
3.0-3.5	0	0	0	0	0	23	0	0	0	0	129
3.5-4.0	0	0	0	0	0	0	0	0	0	0	148
4.0-4.5	0	0	0	0	0	0	0	0	0	0	90
4.5-5.0	0	0	0	0	0	0	0	0	0	0	0
5.0-5.5	0	0	0	0	0	0	0	0	0	0	0
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	79	715	808	367	236	241	95	14	3	0	1558

MEAN HS(M) = 2.91 LARGEST HS(M) = 6.50 MEAN TP(SEC) = 9.2 NUMBER OF CASES = 1558

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49											0
0.5-0.99	3	3	11								17
1.0-1.49	35	10	17	3							46
1.5-1.99	42	25	17								87
2.0-2.49	27	66	25								118
2.5-2.99	1	87	18								106
3.0-3.49		39	42	11							92
3.5-3.99			46	10	1						57
4.0-4.49			29	3	5						37
4.5-4.99											0
5.0-5.49											0
5.5-5.99											1
TOTAL	108	230	189	27	7	0	0	0	0	0	

MEAN HS(M) = 2.58 LARGEST HS(M) = 5.16 MEAN TP(SEC) = 7.4 NUMBER OF CASES = 336

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49											0
0.5-0.99	3										3
1.0-1.49	3										3
1.5-1.99	1	1									2
2.0-2.49											0
2.5-2.99											0
3.0-3.49											0
3.5-3.99											0
4.0-4.49											0
4.5-4.99											0
5.0-5.49											0
5.5-5.99											0
TOTAL	7	1	0	0	0	0	0	0	0	0	6

MEAN HS(M) = 0.98 LARGEST HS(M) = 1.79 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 6

PHASE 3 ST. 108 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 37.11N/122.31W LAT. LON. END= 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

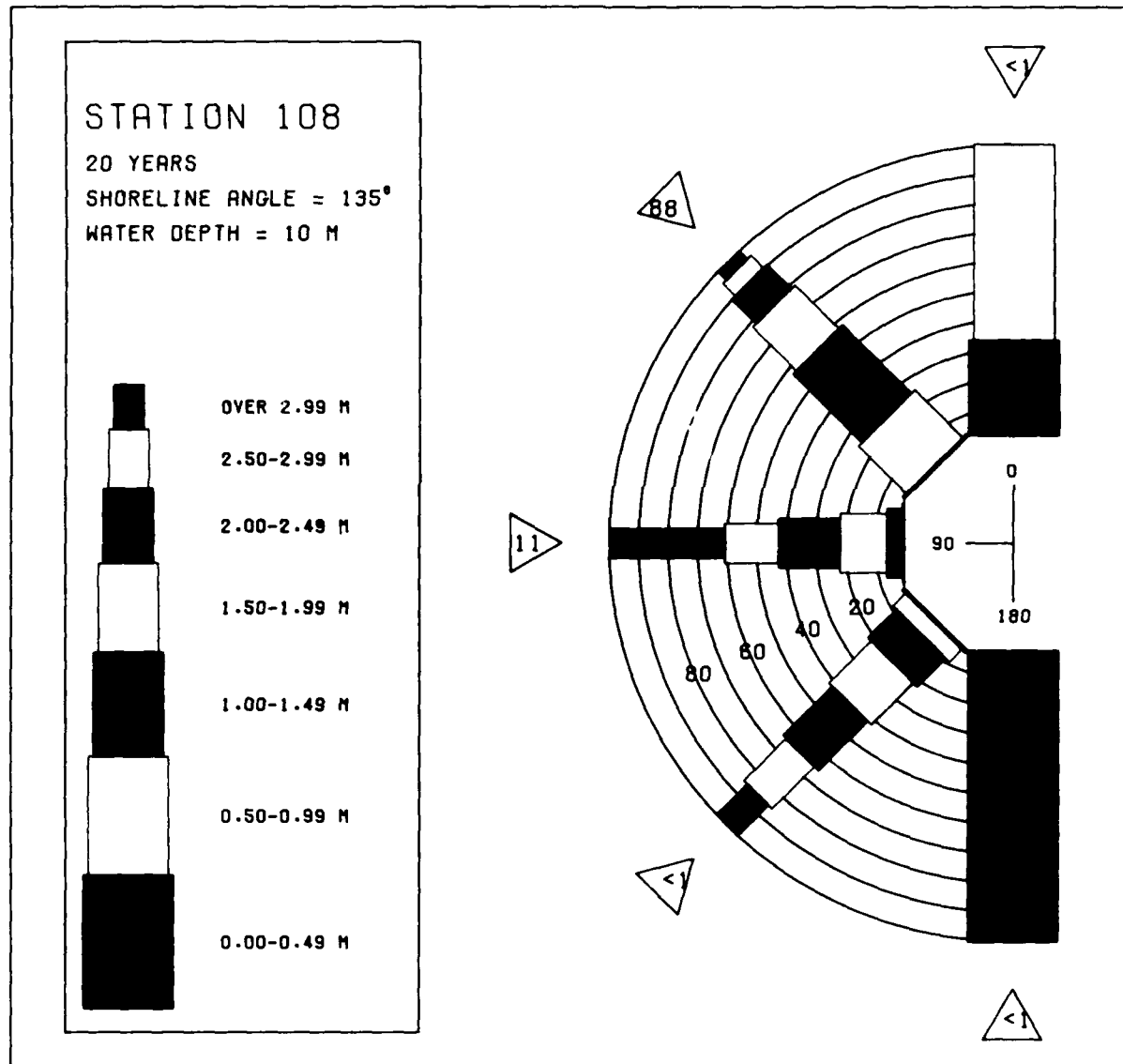
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49											0
0.5-0.99											0
1.0-1.49											0
1.5-1.99											0
2.0-2.49											0
2.5-2.99											0
3.0-3.49											0
3.5-3.99											0
4.0-4.49											0
4.5-4.99											0
5.0-5.49											0
5.5-5.99											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 108 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 37.11N/122.31W LAT. LONG. END= 37.01N/122.21W
 SHORELINE ANGLE = 135.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	22.3-	LONGER	
5.4-5.9	21	28	47	32	18	17	16	17	1	1	1	106
5.0-5.3	10	13	26	15	15	14	13	15	1	1	1	105
4.6-4.9	3	4	7	3	1	1	1	1	1	1	1	105
4.2-4.5	1	1	1	1	1	1	1	1	1	1	1	105
3.8-4.1	1	1	1	1	1	1	1	1	1	1	1	105
3.4-3.7	1	1	1	1	1	1	1	1	1	1	1	105
3.0-3.3	1	1	1	1	1	1	1	1	1	1	1	105
2.6-2.9	1	1	1	1	1	1	1	1	1	1	1	105
2.2-2.5	1	1	1	1	1	1	1	1	1	1	1	105
1.8-2.1	1	1	1	1	1	1	1	1	1	1	1	105
1.4-1.7	1	1	1	1	1	1	1	1	1	1	1	105
1.0-1.3	1	1	1	1	1	1	1	1	1	1	1	105
0.6-0.9	1	1	1	1	1	1	1	1	1	1	1	105
0.2-0.5	1	1	1	1	1	1	1	1	1	1	1	105
0.0-0.1	1	1	1	1	1	1	1	1	1	1	1	105
TOTAL	502	1464	1665	1126	1671	2046	1264	213	6	0	0	58440

MEAN HS(M) = 1.67 LARGEST HS(M) = 6.50 MEAN TP(SEC) = 10.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 108 (37.11N/ 122.31W TO 37.01N/ 122.21W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1955	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1956	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1957	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1958	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1959	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1960	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1961	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1962	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1963	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1964	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1965	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1966	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1967	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1968	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1969	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1970	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1971	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1972	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1973	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1974	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1975	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MEAN	2.4	2.5	2.0	1.7	1.3	1.2	1.1	1.0	1.0	1.4	1.9	2.4	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 108 (37.11N/ 122.31W TO 37.01N/ 122.21W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1955	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1956	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1957	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1958	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1959	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1960	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1961	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1962	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1963	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1964	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1965	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1966	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1967	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1968	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1969	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1970	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1971	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1972	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1973	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1974	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
1975	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	

20 YR. STATISTICS FOR PACIFIC STATION 108 (37.11N/ 122.31W TO 37.01N/ 122.21W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	80.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.5
LARGEST WAVE HS	(METERS)	14.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.5
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	80.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011609

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 37.01N/122.21W LAT. LON. END = 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	75	0	0	0	0	0	0	0	0	0	75
0.50	0	0	0	0	0	0	0	0	0	0	0
0.51	0	0	0	0	0	0	0	0	0	0	0
0.52	0	0	0	0	0	0	0	0	0	0	0
0.53	0	0	0	0	0	0	0	0	0	0	0
0.54	0	0	0	0	0	0	0	0	0	0	0
0.55	0	0	0	0	0	0	0	0	0	0	0
0.56	0	0	0	0	0	0	0	0	0	0	0
0.57	0	0	0	0	0	0	0	0	0	0	0
0.58	0	0	0	0	0	0	0	0	0	0	0
0.59	0	0	0	0	0	0	0	0	0	0	0
0.60	0	0	0	0	0	0	0	0	0	0	0
TOTAL	75	0	0	0	0	0	0	0	0	0	75

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.30 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 44

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 37.01N/122.21W LAT. LON. END = 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	485	550	172	0	0	0	0	0	0	0	1177
0.50	292	593	470	0	0	0	0	0	0	0	980
0.51	1704	473	470	0	0	0	0	0	0	0	6886
0.52	49	143	88	0	0	0	0	0	0	0	1560
0.53	1	118	1	0	0	0	0	0	0	0	119
0.54	0	0	0	0	0	0	0	0	0	0	0
0.55	0	0	0	0	0	0	0	0	0	0	0
0.56	0	0	0	0	0	0	0	0	0	0	0
0.57	0	0	0	0	0	0	0	0	0	0	0
0.58	0	0	0	0	0	0	0	0	0	0	0
0.59	0	0	0	0	0	0	0	0	0	0	0
0.60	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5231	12612	1701	0	0	0	0	0	0	0	11427

MEAN HS(M) = 0.98 LARGEST HS(M) = 2.64 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 11427

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 37.01N/122.21W LAT. LON. END = 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	13	13	9	124	46	12	12	29	20	0	861
0.50	25	518	862	5001	3321	1024	128	29	20	0	18537
0.51	71	509	2809	4385	8384	5816	1023	85	10	0	33092
0.52	88	716	1088	614	3258	7571	2802	248	10	0	16395
0.53	8	434	2576	227	694	3601	3754	467	1	0	9662
0.54	0	131	227	80	140	1047	2819	419	5	0	4868
0.55	0	23	58	44	289	1168	422	17	0	0	2092
0.56	0	0	3	5	22	162	374	6	0	0	868
0.57	0	0	0	6	11	68	150	0	0	0	407
0.58	0	0	0	0	0	25	56	0	0	0	126
0.59	0	0	0	0	0	0	3	0	0	0	32
0.60	0	0	0	0	0	0	0	0	0	0	0
TOTAL	205	2344	13859	10492	15947	19620	12319	2105	69	0	45001

MEAN HS(M) = 1.55 LARGEST HS(M) = 5.65 MEAN TP(SEC) = 11.4 NUMBER OF CASES = 45001

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 37.01N/122.21W LAT. LON. END = 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.49	3	1	8	0	0	0	0	0	0	0	11
0.50	3	1	8	0	0	0	0	0	0	0	11
0.51	11	107	330	17	17	11	0	0	0	0	1341
0.52	1	277	333	23	54	12	0	0	0	0	5513
0.53	0	24	333	78	25	23	0	0	0	0	5574
0.54	0	10	223	95	35	18	0	0	0	0	5544
0.55	0	0	46	30	13	15	0	0	0	0	1100
0.56	0	0	1	11	16	10	0	0	0	0	507
0.57	0	0	0	0	0	0	0	0	0	0	0
0.58	0	0	0	0	0	0	0	0	0	0	0
0.59	0	0	0	0	0	0	0	0	0	0	0
0.60	0	0	0	0	0	0	0	0	0	0	0
TOTAL	135	846	943	355	185	120	56	8	0	0	1565

MEAN HS(M) = 2.81 LARGEST HS(M) = 6.50 MEAN TP(SEC) = 8.7 NUMBER OF CASES = 1565

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LONG. START= 37.01N/122.21W LAT. LONG. END= 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	29	3	18	.	.	.	.	.	.	32
0.50-0.99	17	1	16	.	.	.	.	.	.	36
1.00-1.49	46	8	13	3	.	.	.	.	.	50
1.50-1.99	58	7	13	.	.	.	.	.	.	71
2.00-2.49	32	8	10	.	.	.	.	.	.	50
2.50-2.99	5	3	8	1	.	.	.	.	.	16
3.00-3.49	.	.	18	3	1	.	.	.	.	23
3.50-3.99	.	.	8	.	.	.	.	.	.	16
4.00-4.49	.	.	.	.	.	.	.	.	.	8
4.50-4.99	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	0
TOTAL	187	255	118	7	1	0	0	0	0	339	

MEAN HS(M) = 2.14 LARGEST HS(M) = 4.27 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 339

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LONG. START= 37.01N/122.21W LAT. LONG. END= 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	53	.	.	.	.	.	.	.	.	53
0.50-0.99	0	
1.00-1.49	0	
1.50-1.99	0	
2.00-2.49	0	
2.50-2.99	0	
3.00-3.49	0	
3.50-3.99	0	
4.00-4.49	0	
4.50-4.99	0	
5.00+	0	
TOTAL	53	0	0	0	0	0	0	0	0	53	

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.29 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 31

PHASE 3 ST. 109 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LONG. START= 37.01N/122.21W LAT. LONG. END= 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

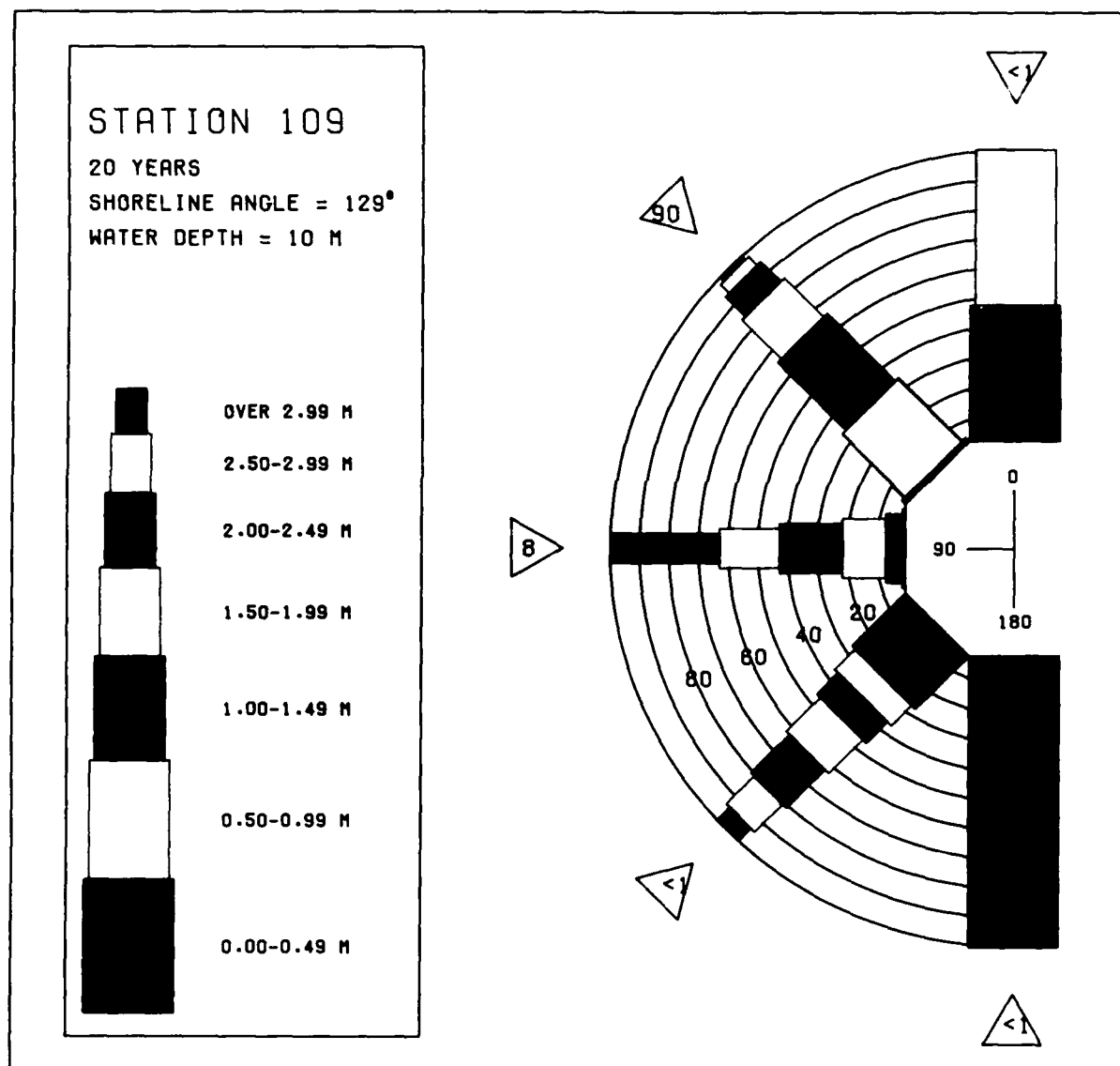
HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	
0.50-0.99	0	
1.00-1.49	0	
1.50-1.99	0	
2.00-2.49	0	
2.50-2.99	0	
3.00-3.49	0	
3.50-3.99	0	
4.00-4.49	0	
4.50-4.99	0	
5.00+	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 109 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 37.01N/122.21W LAT. LON. END= 36.95N/122.08W
 SHORELINE ANGLE = 129.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-10.0	10.1-12.0	12.1-14.0	14.1-16.0	16.1-18.0	18.1-20.0	20.1-22.0	22.3-LONGER	TOTAL
0.0-0.49	180	200	246	501	332	102	102	102	102	216	216
0.50-0.99	180	200	246	501	332	102	102	102	102	216	216
1.00-1.49	180	200	246	501	332	102	102	102	102	216	216
1.50-1.99	180	200	246	501	332	102	102	102	102	216	216
2.00-2.49	180	200	246	501	332	102	102	102	102	216	216
2.50-2.99	180	200	246	501	332	102	102	102	102	216	216
3.00-3.49	180	200	246	501	332	102	102	102	102	216	216
3.50-3.99	180	200	246	501	332	102	102	102	102	216	216
4.00-4.49	180	200	246	501	332	102	102	102	102	216	216
4.50-4.99	180	200	246	501	332	102	102	102	102	216	216
5.00+	180	200	246	501	332	102	102	102	102	216	216
TOTAL	586	1603	1659	1082	1608	1969	1233	205	5	6	58440

MEAN HS(M) = 1.48 LARGEST HS(M) = 6.50 MEAN TP(SEC) = 10.4 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 109 (37.01N/ 122.21W TO 36.95N/ 122.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1957	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1958	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1959	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1960	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1961	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1962	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1963	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1964	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1965	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1966	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1967	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1968	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1969	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1970	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1971	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1972	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1973	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1974	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1975	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MEAN	2.2	2.2	1.8	1.5	1.2	1.1	0.9	0.9	0.9	1.2	1.7	2.2	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 109 (37.01N/ 122.21W TO 36.95N/ 122.08W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1957	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1958	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1959	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1960	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1961	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1962	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1963	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1964	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1965	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1966	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1967	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1968	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1969	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1970	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1971	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1972	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1973	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1974	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1975	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

20 YR. STATISTICS FOR PACIFIC STATION109 (37.01N/ 122.21W TO 36.95N/ 122.08W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTION)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.0
LARGEST WAVE HS	(METERS)	1.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.4
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTION)	70.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		74011609

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LONG. START= 36.95N/122.08W LAT. LONG. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	9214	.	.	.	.	.	.	.	.	.	9214
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 +	0
TOTAL	9214	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.31 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 5385

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LONG. START= 36.95N/122.08W LAT. LONG. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	8738	20853	9656	1208	.	.	.	.	.	.	40455
0.5 - 0.99	566	2270	1031	5	.	.	.	.	.	.	3872
1.0 - 1.49	142	580	135	.	.	.	.	.	.	.	857
1.5 - 1.99	.	56	11	.	.	.	.	.	.	.	67
2.0 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.5 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.0 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.5 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.0 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.5 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.0 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	9446	23759	10833	1213	0	0	0	0	0	0	0

MEAN HS(M) = 0.26 LARGEST HS(M) = 1.83 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 26448

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LONG. START= 36.95N/122.08W LAT. LONG. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	946	111	39	344	522	361	1018	182	10	.	14512
0.5 - 0.99	848	381	210	338	800	1753	1420	244	.	.	5994
1.0 - 1.49	492	915	501	196	148	160	176	46	.	.	2634
1.5 - 1.99	102	959	467	147	99	82	25	.	.	.	1899
2.0 - 2.49	6	342	427	152	39	37	18	.	.	.	1021
2.5 - 2.99	.	34	311	88	13	3	1	.	.	.	467
3.0 - 3.49	.	3	37	27	13	3	.	.	.	.	101
3.5 - 3.99	.	.	17	15	8	15	.	.	.	.	56
4.0 - 4.49	.	.	1	1	6	1	.	.	.	.	16
4.5 - 4.99	.	.	.	.	1	.	.	.	.	.	1
5.0 +	.	.	.	.	1	.	.	.	.	.	4
TOTAL	2394	2745	2010	4411	6369	5709	2677	380	10	0	0

MEAN HS(M) = 0.73 LARGEST HS(M) = 5.33 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 15627

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LONG. START= 36.95N/122.08W LAT. LONG. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3964	239	3	.	.	.	.	.	.	.	4206
0.5 - 0.99	446	42	1	.	.	.	.	.	.	.	489
1.0 - 1.49	47	61	1	.	.	.	.	.	.	.	111
1.5 - 1.99	5	58	1	.	.	.	.	.	.	.	76
2.0 - 2.49	.	15	1	.	.	.	.	.	.	.	33
2.5 - 2.99	.	.	3	.	.	.	.	.	.	.	3
3.0 - 3.49	.	.	.	.	.	.	.	.	.	.	12
3.5 - 3.99	.	.	.	.	.	.	.	.	.	.	1
4.0 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.5 - 4.99	.	.	.	.	.	.	.	.	.	.	1
5.0 +	.	.	.	.	.	.	.	.	.	.	1
TOTAL	4462	415	39	8	3	6	0	0	0	0	0

MEAN HS(M) = 0.30 LARGEST HS(M) = 5.12 MEAN TP(SEC) = 5.0 NUMBER OF CASES = 2890

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 110 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

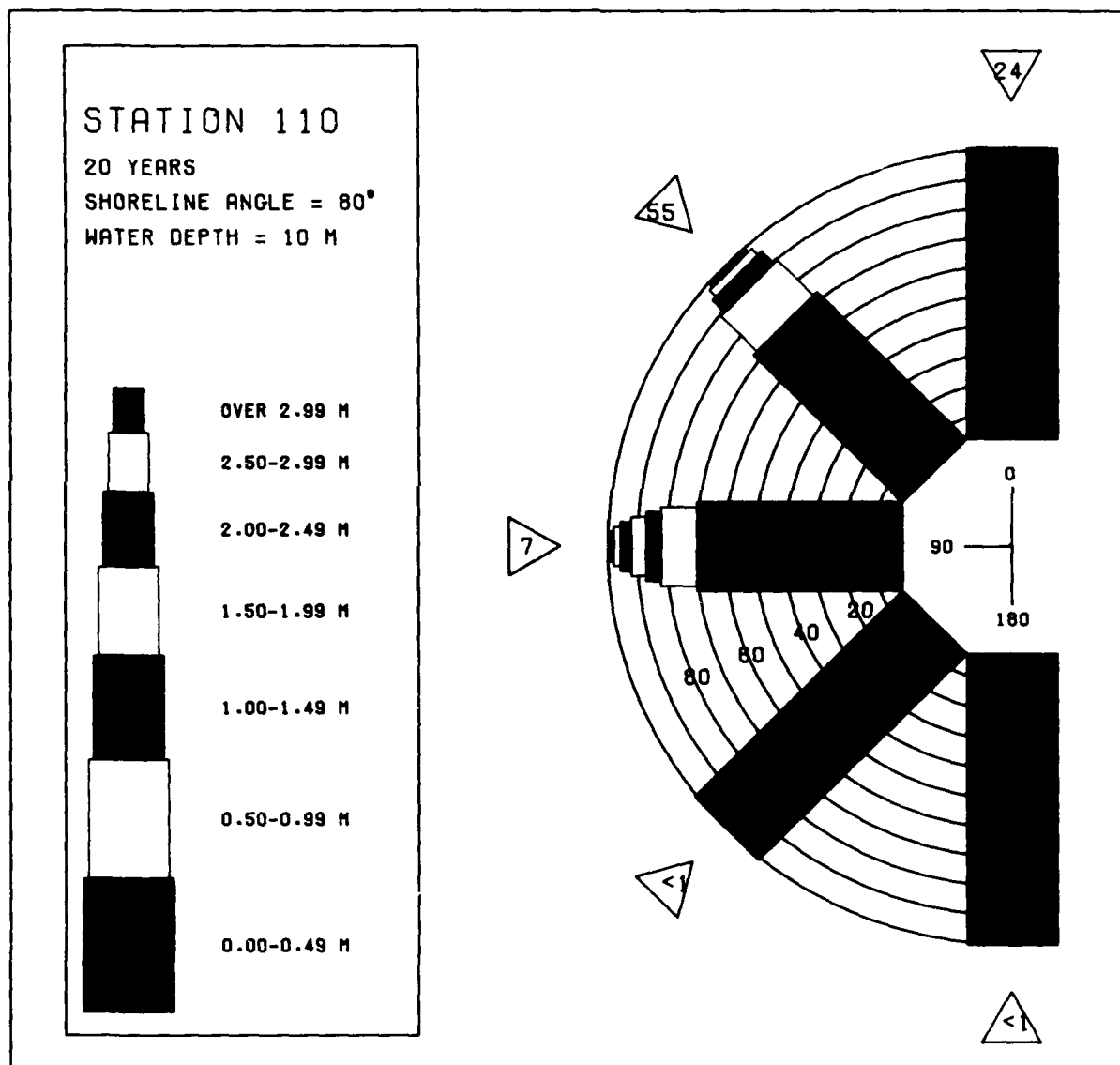
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 110 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 36.95N/122.08W LAT. LON. END= 36.96N/121.90W
 SHORELINE ANGLE = 80.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0-	2286	2120	969	465	10.6-	11.7	13.3	15.3	18.1	22.2	LONGER	6835
0.0-0.49	186	124	124	34	11.7	361	175	142	8	1	.	1034
0.50-0.99	68	107	63	19	13.3	16	17	24	.	.	.	356
1.0-1.49	10	3	44	15	15.3	9	3	1	.	.	.	200
1.50-1.99	.	3	31	8	18.1	1	2	.	.	.	.	101
2.00-2.49	.	.	4	3	22.2	.	.	.	.	.	.	44
2.50-2.99	.	.	1	1	LONGER	.	.	.	.	.	.	10
3.00-3.49	.	.	.	.	.	.	.	.	.	.	.	4
3.50-3.99	.	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2550	2689	1285	559	633	567	264	36	1	0		58440

MEAN HS(M) = 0.33 LARGEST HS(M) = 5.33 MEAN TP(SEC)= 7.8 TOTAL CASES = 58440



PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0.0 - 14.9
 LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	5172	29	.	.	.	.	.	.	.	.	5201
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	5172	29	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.08 LARGEST HS(M) = 0.25 MEAN TP(SEC) = 4.9 NUMBER OF CASES = 3040

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	12695	6314	1454	234	66	10	25	.	.	.	20801
0.50 - 0.99	3785	11808	6889	3778	3141	1136	107	11	.	.	50555
1.00 - 1.49	266	3574	1841	990	2476	2717	821	15	.	.	15050
1.50 - 1.99	13	706	975	239	728	1341	1067	75	.	.	15144
2.00 - 2.49	.	51	143	136	362	590	354	95	.	.	17311
2.50 - 2.99	.	.	11	49	145	410	208	5	.	.	8228
3.00 - 3.49	.	.	5	1	54	330	162	32	.	.	584
3.50 - 3.99	.	.	1	1	11	126	160	8	.	.	307
4.00 - 4.49	.	.	.	.	.	80	162	3	.	.	345
4.50 - 4.99	.	.	.	.	.	17	99	3	.	.	121
5.00 +	.	.	.	.	.	30	30	3	.	.	33
TOTAL	16759	22453	11319	5428	6983	6757	3195	255	0	0	0

MEAN HS(M) = 0.87 LARGEST HS(M) = 6.27 MEAN TP(SEC) = 8.3 NUMBER OF CASES = 42768

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	503	63	6	1	5	.	.	.	.	.	573
0.50 - 0.99	441	316	29	1	49	17	.	.	.	.	800
1.00 - 1.49	260	780	114	25	97	71	.	.	.	.	12500
1.50 - 1.99	63	894	385	150	116	165	70	14	3	.	16500
2.00 - 2.49	.	393	429	193	97	42	56	49	.	.	14650
2.50 - 2.99	.	54	128	68	42	47	35	18	.	.	9500
3.00 - 3.49	.	3	13	44	59	49	34	18	.	.	7000
3.50 - 3.99	.	.	6	6	15	70	33	5	.	.	4900
4.00 - 4.49	.	.	.	6	3	35	18	.	.	.	1300
4.50 - 4.99	.	.	.	.	.	11	18	.	.	.	29
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1267	2503	1491	589	483	507	342	157	15	0	0

MEAN HS(M) = 1.87 LARGEST HS(M) = 6.40 MEAN TP(SEC) = 8.5 NUMBER OF CASES = 4320

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	3853	318	1	.	.	.	.	.	.	.	4172
0.5-0.99	622	183	3	.	.	.	.	.	.	.	808
1.0-1.49	200	299	39	1	.	.	.	.	.	.	538
1.5-1.99	13	215	51	1	.	.	.	.	.	.	280
2.0-2.49	.	17	100	15	1	.	.	.	.	.	133
2.5-2.99	.	.	30	8	.	.	.	.	.	.	38
3.0-3.49	.	.	6	.	1	.	.	.	.	.	2
3.5-3.99	.	.	.	.	.	.	.	.	.	.	6
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	0
6.0-6.49	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4688	1032	231	24	2	0	0	0	0	0	

MEAN HS(M) = 0.46 LARGEST HS(M) = 3.76 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 3500

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 111 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.96N/121.90W LAT. LON. END= 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
6.0-6.49	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 111 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 36.96N/121.90W LAT. LON. END = 36.85N/121.81W
 SHORELINE ANGLE = 144.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
											LONGER	
0.00	2222	672	146	23	314	113	100	1	1	1	1	3072
0.05	484	1230	692	377	252	273	114	1	1	1	1	3221
0.10	729	465	199	101	252	141	100	1	1	1	1	1425
0.15		181	141	29	488	75	114	1	1	1	1	704
0.20		46	67	24	24	43	114	1	1	1	1	331
0.25		56	41	5	7	37	100	1	1	1	1	171
0.30			1	4	1	17	100	1	1	1	1	88
0.35						5	100	1	1	1	1	49
0.40							100	1	1	1	1	35
0.45							100	1	1	1	1	17
0.50							100	1	1	1	1	5
TOTAL	2787	2599	1302	600	743	723	348	36	0	0	0	58440

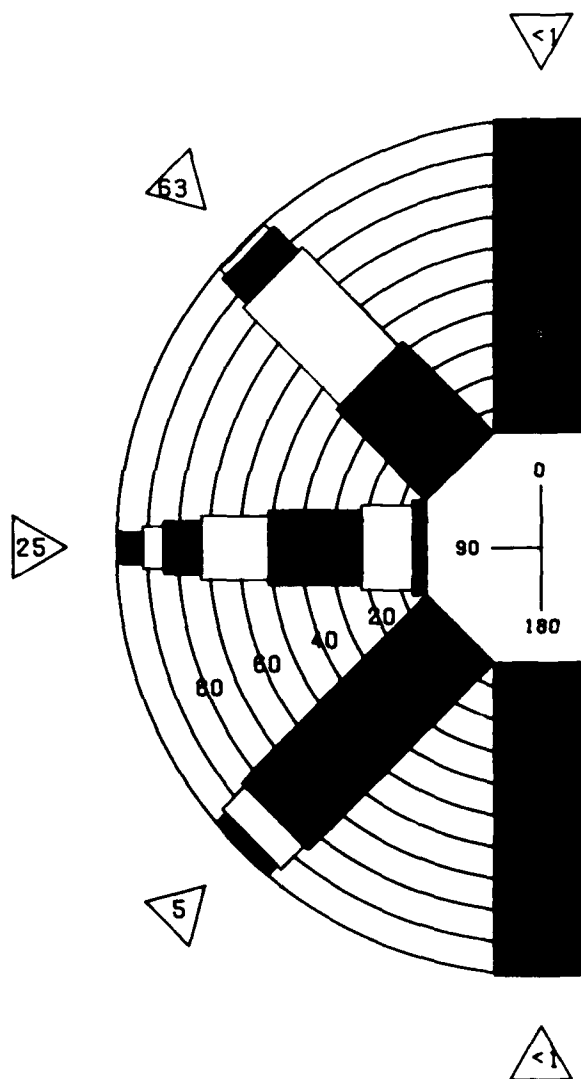
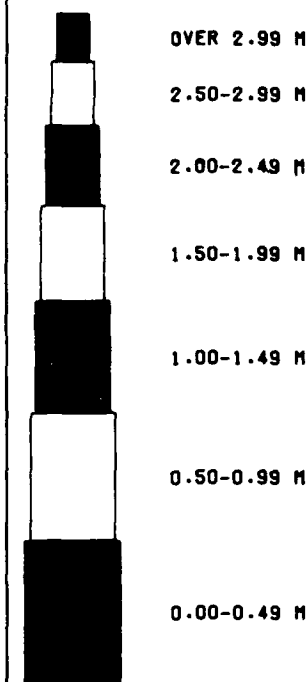
MEAN HS(M) = 0.81 LARGEST HS(M) = 6.40 MEAN TP(SEC) = 7.9 TOTAL CASES = 58440

STATION 111

20 YEARS

SHORELINE ANGLE = 144°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 111 (36.96N/ 121.90W TO 36.85N/ 121.81W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1956	1.8	1.0	0.9	0.8	0.8	0.7	0.5	0.6	0.5	0.7	0.6	1.2	0.8
1957	1.0	1.3	1.2	0.7	0.9	0.5	0.4	0.5	0.7	1.0	0.8	1.1	0.8
1958	1.6	2.0	1.1	0.6	0.6	0.6	0.6	0.5	0.3	0.4	0.8	1.0	0.9
1959	1.3	1.3	0.7	0.6	0.8	0.6	0.5	0.5	0.8	0.8	0.4	0.9	0.8
1960	1.4	1.3	0.9	0.7	0.7	0.7	0.5	0.4	0.5	0.6	1.1	1.4	0.9
1961	1.5	1.3	1.1	0.7	0.8	0.5	0.4	0.4	0.5	0.5	0.9	0.8	0.8
1962	1.1	1.7	1.1	0.6	0.7	0.4	0.4	0.4	0.5	1.2	0.9	2.3	0.9
1963	1.1	2.9	1.0	1.1	0.7	0.7	0.5	0.5	0.6	0.9	1.1	2.2	1.0
1964	1.5	0.7	0.9	0.9	0.9	1.1	0.8	0.7	0.5	0.7	1.0	2.0	0.8
1965	1.6	0.5	0.8	1.0	0.6	0.9	0.6	0.5	0.5	0.7	1.1	1.0	0.8
1966	1.1	1.0	0.9	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.8	1.7	0.8
1967	1.0	0.8	1.2	1.0	0.6	0.6	0.5	0.5	0.6	0.8	0.6	1.1	0.9
1968	1.1	0.8	0.7	0.6	0.7	0.7	0.7	0.6	0.5	0.6	1.1	1.4	1.0
1969	1.4	1.5	0.7	0.9	0.7	0.7	0.6	0.4	0.6	0.6	0.6	1.3	0.9
1970	2.3	0.9	0.9	0.9	0.8	0.6	0.7	0.5	0.4	0.5	1.0	1.3	0.9
1971	1.1	1.3	1.2	1.0	0.8	0.8	0.6	0.7	0.6	0.6	1.1	1.2	0.9
1972	1.0	1.3	1.2	0.9	0.8	0.9	0.8	0.8	0.5	0.5	1.2	1.5	0.9
1973	1.5	1.4	1.4	0.9	1.0	0.8	0.9	0.9	0.7	0.7	1.4	1.4	1.1
1974	2.1	0.9	1.1	1.0	1.2	0.8	0.9	0.8	0.6	0.7	0.7	0.9	1.0
1975	0.7	1.2	1.2	0.8	0.8	0.7	0.8	0.6	0.4	0.8	0.7	0.7	0.8
MEAN	1.4	1.3	1.1	0.8	0.8	0.7	0.6	0.6	0.5	0.7	0.9	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 111 (36.96N/ 121.90W TO 36.85N/ 121.81W)
MONTH

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1956	2.3	3.3	2.0	1.8	1.4	1.3	1.0	1.1	1.1	2.8	2.3	2.3
1957	2.5	3.3	2.2	2.1	2.1	1.1	0.8	0.8	1.2	2.5	2.1	2.0
1958	2.3	4.6	2.6	3.1	2.0	1.2	0.9	0.9	1.1	2.8	2.1	2.6
1959	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1960	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1961	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1962	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1963	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1964	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1965	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1966	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1967	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1968	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1969	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1970	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1971	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1972	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1973	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1974	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6
1975	2.4	3.3	2.2	2.4	2.0	1.1	0.8	0.8	1.1	2.8	2.1	2.6

20 YR. STATISTICS FOR PACIFIC STATION111 (36.96N/ 121.90W TO 36.85N/ 121.81W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.8
MEAN PEAK WAVE PERIOD	(SECONDS)	7.0
MOST FREQUENT 300 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.8
LARGEST WAVE HS	(METERS)	14.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	84.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	74011609
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	7
0.50-0.99	1	1	1	1	1	1	1	1	1	1	5
1.00-1.49	1	1	1	1	1	1	1	1	1	1	7
1.50-1.99	1	1	1	1	1	1	1	1	1	1	7
2.00-2.49	1	1	1	1	1	1	1	1	1	1	7
2.50-2.99	1	1	1	1	1	1	1	1	1	1	7
3.00-3.49	1	1	1	1	1	1	1	1	1	1	7
3.50-3.99	1	1	1	1	1	1	1	1	1	1	7
4.00-4.49	1	1	1	1	1	1	1	1	1	1	7
4.50-4.99	1	1	1	1	1	1	1	1	1	1	7
5.00+	1	1	1	1	1	1	1	1	1	1	7
TOTAL	24	223	273	120	73	39	0	0	0	0	451

MEAN HS(M) = 2.54 LARGEST HS(M) = 5.17 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 451

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.24 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 5

PHASE 3 ST. 112 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.85N/121.81W LAT. LON. END= 36.73N/121.81W
 SHORELINE ANGLE = 180.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 112 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 36.85N/121.81W LAT. LONG. END = 36.73N/121.81W
 SHORELINE ANGLE = 180.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-5.0	6.1-6.5	8.1-8.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-22.3- LONGER	TOTAL
0.00-0.49	230	1110	1780	1261	1842	2180	1317	224	7	0	33
0.50-0.99	230	1110	1780	1261	1842	2180	1317	224	7	0	722
1.00-1.49	230	1110	1780	1261	1842	2180	1317	224	7	0	2060
1.50-1.99	230	1110	1780	1261	1842	2180	1317	224	7	0	3050
2.00-2.49	230	1110	1780	1261	1842	2180	1317	224	7	0	4180
2.50-2.99	230	1110	1780	1261	1842	2180	1317	224	7	0	5440
3.00-3.49	230	1110	1780	1261	1842	2180	1317	224	7	0	722
3.50-3.99	230	1110	1780	1261	1842	2180	1317	224	7	0	900
4.00-4.49	230	1110	1780	1261	1842	2180	1317	224	7	0	1080
4.50-4.99	230	1110	1780	1261	1842	2180	1317	224	7	0	1260
5.00-5.49	230	1110	1780	1261	1842	2180	1317	224	7	0	1440
5.50-5.99	230	1110	1780	1261	1842	2180	1317	224	7	0	1620
6.00-6.49	230	1110	1780	1261	1842	2180	1317	224	7	0	1800
6.50-6.99	230	1110	1780	1261	1842	2180	1317	224	7	0	1980
7.00-7.49	230	1110	1780	1261	1842	2180	1317	224	7	0	2160
7.50-7.99	230	1110	1780	1261	1842	2180	1317	224	7	0	2340
8.00-8.49	230	1110	1780	1261	1842	2180	1317	224	7	0	2520
8.50-8.99	230	1110	1780	1261	1842	2180	1317	224	7	0	2700
9.00-9.49	230	1110	1780	1261	1842	2180	1317	224	7	0	2880
9.50-9.99	230	1110	1780	1261	1842	2180	1317	224	7	0	3060
10.00-10.49	230	1110	1780	1261	1842	2180	1317	224	7	0	3240
10.50-10.99	230	1110	1780	1261	1842	2180	1317	224	7	0	3420
11.00-11.49	230	1110	1780	1261	1842	2180	1317	224	7	0	3600
11.50-11.99	230	1110	1780	1261	1842	2180	1317	224	7	0	3780
12.00-12.49	230	1110	1780	1261	1842	2180	1317	224	7	0	3960
12.50-12.99	230	1110	1780	1261	1842	2180	1317	224	7	0	4140
13.00-13.49	230	1110	1780	1261	1842	2180	1317	224	7	0	4320
13.50-13.99	230	1110	1780	1261	1842	2180	1317	224	7	0	4500
14.00-14.49	230	1110	1780	1261	1842	2180	1317	224	7	0	4680
14.50-14.99	230	1110	1780	1261	1842	2180	1317	224	7	0	4860
15.00-15.49	230	1110	1780	1261	1842	2180	1317	224	7	0	5040
15.50-15.99	230	1110	1780	1261	1842	2180	1317	224	7	0	5220
16.00-16.49	230	1110	1780	1261	1842	2180	1317	224	7	0	5400
16.50-16.99	230	1110	1780	1261	1842	2180	1317	224	7	0	5580
17.00-17.49	230	1110	1780	1261	1842	2180	1317	224	7	0	5760
17.50-17.99	230	1110	1780	1261	1842	2180	1317	224	7	0	5940
18.00-18.49	230	1110	1780	1261	1842	2180	1317	224	7	0	6120
18.50-18.99	230	1110	1780	1261	1842	2180	1317	224	7	0	6300
19.00-19.49	230	1110	1780	1261	1842	2180	1317	224	7	0	6480
19.50-19.99	230	1110	1780	1261	1842	2180	1317	224	7	0	6660
20.00-20.49	230	1110	1780	1261	1842	2180	1317	224	7	0	6840
20.50-20.99	230	1110	1780	1261	1842	2180	1317	224	7	0	7020
21.00-21.49	230	1110	1780	1261	1842	2180	1317	224	7	0	7200
21.50-21.99	230	1110	1780	1261	1842	2180	1317	224	7	0	7380
22.00-22.49	230	1110	1780	1261	1842	2180	1317	224	7	0	7560
22.50-22.99	230	1110	1780	1261	1842	2180	1317	224	7	0	7740
23.00-23.49	230	1110	1780	1261	1842	2180	1317	224	7	0	7920
23.50-23.99	230	1110	1780	1261	1842	2180	1317	224	7	0	8100
24.00-24.49	230	1110	1780	1261	1842	2180	1317	224	7	0	8280
24.50-24.99	230	1110	1780	1261	1842	2180	1317	224	7	0	8460
25.00-25.49	230	1110	1780	1261	1842	2180	1317	224	7	0	8640
25.50-25.99	230	1110	1780	1261	1842	2180	1317	224	7	0	8820
26.00-26.49	230	1110	1780	1261	1842	2180	1317	224	7	0	9000
26.50-26.99	230	1110	1780	1261	1842	2180	1317	224	7	0	9180
27.00-27.49	230	1110	1780	1261	1842	2180	1317	224	7	0	9360
27.50-27.99	230	1110	1780	1261	1842	2180	1317	224	7	0	9540
28.00-28.49	230	1110	1780	1261	1842	2180	1317	224	7	0	9720
28.50-28.99	230	1110	1780	1261	1842	2180	1317	224	7	0	9900
29.00-29.49	230	1110	1780	1261	1842	2180	1317	224	7	0	10080
29.50-29.99	230	1110	1780	1261	1842	2180	1317	224	7	0	10260
30.00-30.49	230	1110	1780	1261	1842	2180	1317	224	7	0	10440
30.50-30.99	230	1110	1780	1261	1842	2180	1317	224	7	0	10620
31.00-31.49	230	1110	1780	1261	1842	2180	1317	224	7	0	10800
31.50-31.99	230	1110	1780	1261	1842	2180	1317	224	7	0	10980
32.00-32.49	230	1110	1780	1261	1842	2180	1317	224	7	0	11160
32.50-32.99	230	1110	1780	1261	1842	2180	1317	224	7	0	11340
33.00-33.49	230	1110	1780	1261	1842	2180	1317	224	7	0	11520
33.50-33.99	230	1110	1780	1261	1842	2180	1317	224	7	0	11700
34.00-34.49	230	1110	1780	1261	1842	2180	1317	224	7	0	11880
34.50-34.99	230	1110	1780	1261	1842	2180	1317	224	7	0	12060
35.00-35.49	230	1110	1780	1261	1842	2180	1317	224	7	0	12240
35.50-35.99	230	1110	1780	1261	1842	2180	1317	224	7	0	12420
36.00-36.49	230	1110	1780	1261	1842	2180	1317	224	7	0	12600
36.50-36.99	230	1110	1780	1261	1842	2180	1317	224	7	0	12780
37.00-37.49	230	1110	1780	1261	1842	2180	1317	224	7	0	12960
37.50-37.99	230	1110	1780	1261	1842	2180	1317	224	7	0	13140
38.00-38.49	230	1110	1780	1261	1842	2180	1317	224	7	0	13320
38.50-38.99	230	1110	1780	1261	1842	2180	1317	224	7	0	13500
39.00-39.49	230	1110	1780	1261	1842	2180	1317	224	7	0	13680
39.50-39.99	230	1110	1780	1261	1842	2180	1317	224	7	0	13860
40.00-40.49	230	1110	1780	1261	1842	2180	1317	224	7	0	14040
40.50-40.99	230	1110	1780	1261	1842	2180	1317	224	7	0	14220
41.00-41.49	230	1110	1780	1261	1842	2180	1317	224	7	0	14400
41.50-41.99	230	1110	1780	1261	1842	2180	1317	224	7	0	14580
42.00-42.49	230	1110	1780	1261	1842	2180	1317	224	7	0	14760
42.50-42.99	230	1110	1780	1261	1842	2180	1317	224	7	0	14940
43.00-43.49	230	1110	1780	1261	1842	2180	1317	224	7	0	15120
43.50-43.99	230	1110	1780	1261	1842	2180	1317	224	7	0	15300
44.00-44.49	230	1110	1780	1261	1842	2180	1317	224	7	0	15480
44.50-44.99	230	1110	1780	1261	1842	2180	1317	224	7	0	15660
45.00-45.49	230	1110	1780	1261	1842	2180	1317	224	7	0	15840
45.50-45.99	230	1110	1780	1261	1842	2180	1317	224	7	0	16020
46.00-46.49	230	1110	1780	1261	1842	2180	1317	224	7	0	16200
46.50-46.99	230	1110	1780	1261	1842	2180	1317	224	7	0	16380
47.00-47.49	230	1110	1780	1261	1842	2180	1317	224	7	0	16560
47.50-47.99	230	1110	1780	1261	1842	2180	1317	224	7	0	16740
48.00-48.49	230	1110	1780	1261	1842	2180	1317	224	7	0	16920
48.50-48.99	230	1110	1780	1261	1842	2180	1317	224	7	0	17100
49.00-49.49	230	1110	1780	1261	1842	2180	1317	224	7	0	17280
49.50-49.99	230	1110	1780	1261	1842	2180	1317	224	7	0	17460
50.00-50.49	230	1110	1780	1261	1842	2180	1317	224	7	0	17640
50.50-50.99	230	1110	1780	1261	1842	2180	1317	224	7	0	17820
51.00-51.49	230	1110	1780	1261	1842	2180	1317	224	7	0	18000
51.50-51.99	230	1110	1780	1261	1842	2180	1317	224	7	0	18180
52.00-52.49	230	1110	1780	1261	1842	2180	1317	224	7	0	18360
52.50-52.99	230	1110	1780	1261	1842	2180	1317	224	7	0	18540
53.00-53.49	230	1110	1780	1261							

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 112 (36.85N/ 121.81W TO 36.73N/ 121.81W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
1954	3.2	3.3	2.8	2.4	1.8	1.6	1.4	1.3	1.4	2.0	2.8	3.3	
1955													
1956													
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													
MEAN	3.2	3.3	2.8	2.4	1.8	1.6	1.4	1.3	1.4	2.0	2.8	3.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 112 (36.85N/ 121.81W TO 36.73N/ 121.81W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1954	5.1	5.7	5.4	5.3	5.9	5.2	5.0	5.1	5.7	5.2	5.7	5.7
1955												
1956												
1957												
1958												
1959												
1960												
1961												
1962												
1963												
1964												
1965												
1966												
1967												
1968												
1969												
1970												
1971												
1972												
1973												
1974												
1975												

20 YR. STATISTICS FOR PACIFIC STATION 112 (36.85N/ 121.81W TO 36.73N/ 121.81W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.3
MEAN PEAK WAVE PERIOD	(SECONDS)	10.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.1
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.0
LARGEST WAVE HS	(METERS)	16.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.4
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	82.7
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022418

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 36.63N/121.81W LAT. LON. END= 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.00 +	0
TOTAL	3	0	0	0	0	0	0	0	0	0	3

MEAN HS(M) = 0.19 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 2

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	8	6	8	1	1	1	1	1	1	1	23
0.5 - 0.99	195	1023	1740	432	177	90	34	11	1	1	3703
1.0 - 1.49	1368	2450	5191	2835	1042	657	173	30	6	1	14652
1.5 - 1.99	2279	3538	5788	3598	4252	2303	480	44	20	1	20302
2.0 - 2.49	172	2611	1297	2173	4520	3774	1112	97	13	1	15869
2.5 - 2.99	3	616	783	759	3033	4719	1663	177	25	1	11778
3.0 - 3.49	.	118	321	208	1178	4265	1906	239	33	1	8248
3.5 - 3.99	.	11	65	65	321	2486	2238	239	10	1	5435
4.0 - 4.49	.	.	3	1	59	290	2091	189	3	1	3345
4.5 - 4.99	.	.	.	.	.	210	1649	249	3	1	3115
5.00 +	.	.	.	.	.	34	1324	1018	20	1	2396
TOTAL	4025	10373	13204	10126	15583	19528	12620	2283	124	0	51373

MEAN HS(M) = 2.39 LARGEST HS(M) = 6.61 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 51373

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	10	18	18	95	47	6	.	.	.	.	28
0.5-0.99	56	355	547	429	349	68	.	.	.	.	1106
1.0-1.49	66	592	893	556	814	681	39	.	.	.	2397
1.5-1.99	130	373	576	306	621	311	58	.	.	.	2606
2.0-2.49	30	583	249	133	354	415	140	.	.	.	2721
2.5-2.99	.	297	111	90	148	645	136	1	.	.	1638
3.0-3.49	.	77	65	13	8	415	109	3	.	.	857
3.5-3.99	.	.	15	5	1	205	118	.	.	.	351
4.0-4.49	.	.	1	.	5	53	109	.	.	.	165
4.5-4.99	.	.	.	.	.	11	25	.	.	.	41
5.0-5.49	.	.	.	.	.	.	10	.	.	.	10
5.5-5.99	.	.	.	.	.	.	.	.	.	.	.
TOTAL	292	2277	2475	1495	2347	2395	635	4	0	0	6981

MEAN HS(M) = 2.02 LARGEST HS(M) = 5.54 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 6981

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	3	26	25	.	.	.	.	.	.	.	7
0.5-0.99	10	22	28	.	.	.	.	.	.	.	50
1.0-1.49	1	30	17	.	.	.	.	.	.	.	21
1.5-1.99	.	17	3	.	.	.	.	.	.	.	20
2.0-2.49	.	.	.	.	.	.	.	.	.	.	0
2.5-2.99	.	.	.	.	.	.	.	.	.	.	0
3.0-3.49	.	.	.	.	.	.	.	.	.	.	0
3.5-3.99	.	.	.	.	.	.	.	.	.	.	0
4.0-4.49	.	.	.	.	.	.	.	.	.	.	0
4.5-4.99	.	.	.	.	.	.	.	.	.	.	0
5.0-5.49	.	.	.	.	.	.	.	.	.	.	0
5.5-5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	14	75	40	0	0	0	0	0	0	0	79

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.14 MEAN TP(SEC) = 7.3 NUMBER OF CASES = 79

PHASE 3 ST. 113 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.73N/121.81W LAT. LON. END= 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

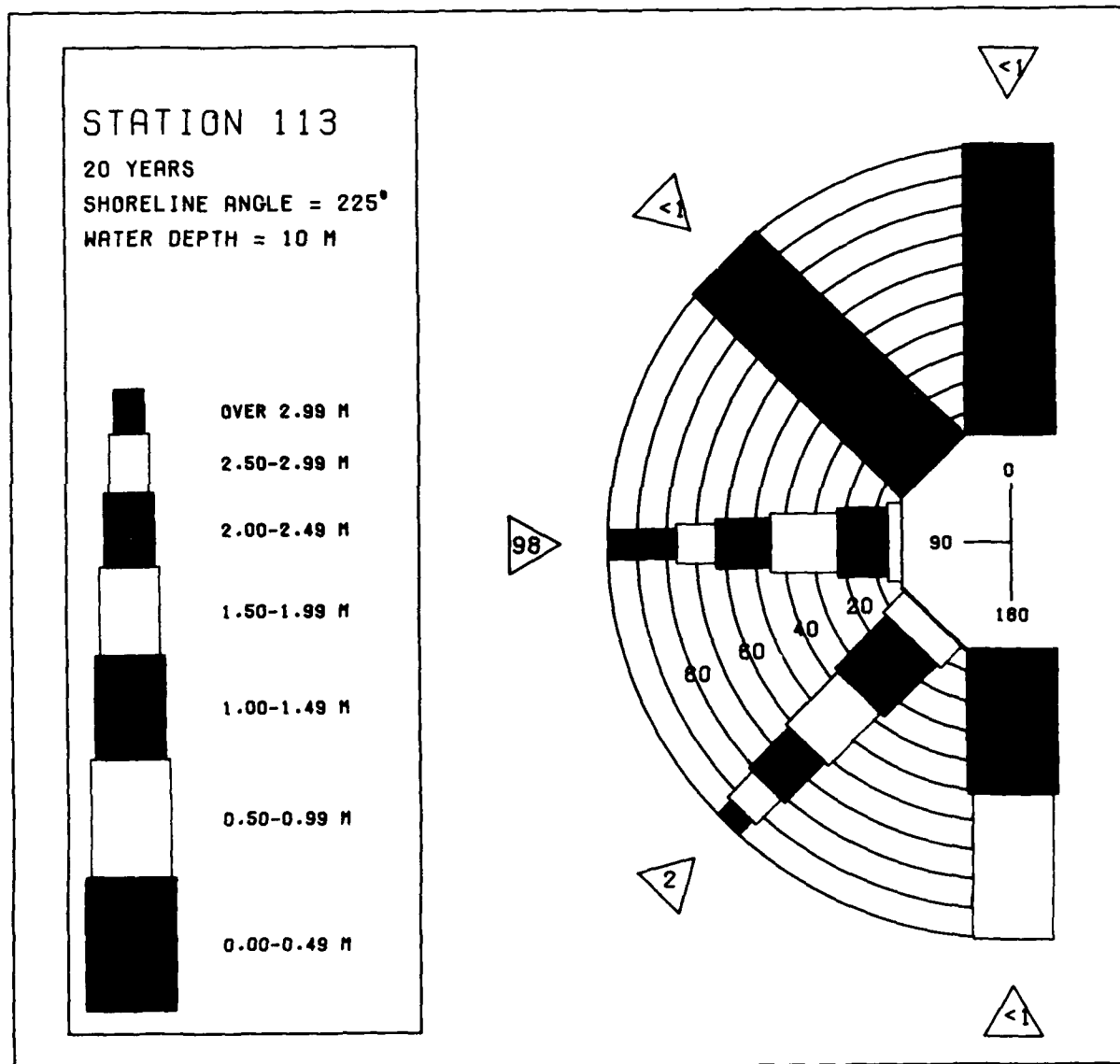
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.5-0.99	0
1.0-1.49	0
1.5-1.99	0
2.0-2.49	0
2.5-2.99	0
3.0-3.49	0
3.5-3.99	0
4.0-4.49	0
4.5-4.99	0
5.0-5.49	0
5.5-5.99	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 113 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. - LON. START = 36.73N/121.81W LAT. - LON. END = 36.63N/121.93W
 SHORELINE ANGLE = 225.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	2	1	2	5	22	9	3	1	..	..	5
0.50-0.99	25	140	231	52	22	72	1	3	..	..	483
1.00-1.49	144	307	609	331	487	261	152	4	..	..	1707
1.50-1.99	241	392	436	415	338	445	117	13	..	..	2290
2.00-2.49	20	319	155	247	536	269	180	17	..	..	1856
2.50-2.99	..	91	89	85	338	269	233	23	..	..	1338
3.00-3.49	..	19	38	22	132	468	204	19	..	..	908
3.50-3.99	..	..	1	7	33	269	235	23	..	..	577
4.00-4.49	..	..	..	..	6	104	220	18	..	..	349
4.50-4.99	..	..	..	..	..	22	167	24	..	..	213
5.00+	..	..	..	..	..	3	133	101	..	..	239
TOTAL	432	1270	1569	1159	1790	2189	1323	223	10	0	58440

MEAN HS(M) = 2.34 LARGEST HS(M) = 6.61 MEAN TP(SEC) = 10.7 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 113 (36.73N/ 121.81W TO 36.63N/ 121.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.7	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1957	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1958	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1959	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1960	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1961	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1962	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1963	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1964	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1965	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1966	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1967	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1968	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1969	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1970	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1971	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1972	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1973	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1974	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
1975	3.0	3.0	2.4	1.1	1.0	2.0	2.4	2.7	2.1	2.0	2.0	2.4	2.4
MEAN	3.1	3.2	2.8	2.5	2.0	1.8	1.6	1.5	1.5	2.1	2.8	3.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 113 (36.73N/ 121.81W TO 36.63N/ 121.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1957	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1958	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1959	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1960	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1961	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1962	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1963	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1964	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1965	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1966	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1967	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1968	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1969	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1970	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1971	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1972	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1973	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1974	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
1975	5.1	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4

20 YR. STATISTICS FOR PACIFIC STATION 113 (36.73N/ 121.81W TO 36.63N/ 121.93W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN PERIOD	(SECONDS)	9.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.0
LARGEST WAVE HS	(METERS)	1.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	1.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		2500

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0.49										13
0.5	-	0.99										333
1.0	-	1.49										2244
1.5	-	1.99										1547
2.0	-	2.49										144
2.5	-	2.99										5
3.0	-	3.49										0
3.5	-	3.99										0
4.0	-	4.49										0
4.5	-	4.99										0
5.0	+											0
TOTAL		2480	1806	0	0	0	0	0	0	0	0	2508
MEAN HS(M) = 1.43		LARGEST HS(M) = 2.76		MEAN TP(SEC) = 5.9		NUMBER OF CASES = 2508						

HEIGHT(METERS)	PERIOD(SECONDS)					TOTAL			
	4.4-5.0	5.1-6.0	6.1-8.0	8.1-10.5	10.6-15.3	15.4-18.1	18.2-22.2	22.3-22.9 LONGER	
1.0	159	181	30	33	216	10	.	.	116
1.5	159	181	30	33	216	10	.	.	116
2.0	159	181	30	33	216	10	.	.	116
2.5	159	181	30	33	216	10	.	.	116
3.0	159	181	30	33	216	10	.	.	116
3.5	159	181	30	33	216	10	.	.	116
4.0	159	181	30	33	216	10	.	.	116
4.5	159	181	30	33	216	10	.	.	116
5.0	159	181	30	33	216	10	.	.	116
5.5	159	181	30	33	216	10	.	.	116
6.0	159	181	30	33	216	10	.	.	116
6.5	159	181	30	33	216	10	.	.	116
7.0	159	181	30	33	216	10	.	.	116
7.5	159	181	30	33	216	10	.	.	116
8.0	159	181	30	33	216	10	.	.	116
8.5	159	181	30	33	216	10	.	.	116
9.0	159	181	30	33	216	10	.	.	116
9.5	159	181	30	33	216	10	.	.	116
10.0	159	181	30	33	216	10	.	.	116
10.5	159	181	30	33	216	10	.	.	116
11.0	159	181	30	33	216	10	.	.	116
11.5	159	181	30	33	216	10	.	.	116
12.0	159	181	30	33	216	10	.	.	116
12.5	159	181	30	33	216	10	.	.	116
13.0	159	181	30	33	216	10	.	.	116
13.5	159	181	30	33	216	10	.	.	116
14.0	159	181	30	33	216	10	.	.	116
14.5	159	181	30	33	216	10	.	.	116
15.0	159	181	30	33	216	10	.	.	116
15.5	159	181	30	33	216	10	.	.	116
16.0	159	181	30	33	216	10	.	.	116
16.5	159	181	30	33	216	10	.	.	116
17.0	159	181	30	33	216	10	.	.	116
17.5	159	181	30	33	216	10	.	.	116
18.0	159	181	30	33	216	10	.	.	116
18.5	159	181	30	33	216	10	.	.	116
19.0	159	181	30	33	216	10	.	.	116
19.5	159	181	30	33	216	10	.	.	116
20.0	159	181	30	33	216	10	.	.	116
20.5	159	181	30	33	216	10	.	.	116
21.0	159	181	30	33	216	10	.	.	116
21.5	159	181	30	33	216	10	.	.	116
22.0	159	181	30	33	216	10	.	.	116
22.5	159	181	30	33	216	10	.	.	116
23.0	159	181	30	33	216	10	.	.	116
23.5									

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0.49	11	3	1	.	.	.	0
0.1	0.99	167	78	56	.	.	.	130
0.2	1.49	36	1	154	39	349	373	253	1	6	.	607
0.3	1.99	10	34	1131	1525	3021	869	749	1	27	.	1472
0.4	2.49	.	20	1140	1407	3202	869	663	119	10	.	2679
0.5	2.99	.	20	1140	1407	3202	869	663	119	10	.	2679
0.6	3.49	.	20	1140	1407	3202	869	663	119	10	.	2679
0.7	3.99	.	20	1140	1407	3202	869	663	119	10	.	2679
0.8	4.49	.	20	1140	1407	3202	869	663	119	10	.	2679
0.9	4.99	.	20	1140	1407	3202	869	663	119	10	.	2679
1.0	5.49	.	20	1140	1407	3202	869	663	119	10	.	2679
1.1	5.99	.	20	1140	1407	3202	869	663	119	10	.	2679
1.2	6.49	.	20	1140	1407	3202	869	663	119	10	.	2679
1.3	6.99	.	20	1140	1407	3202	869	663	119	10	.	2679
1.4	7.49	.	20	1140	1407	3202	869	663	119	10	.	2679
1.5	7.99	.	20	1140	1407	3202	869	663	119	10	.	2679
1.6	8.49	.	20	1140	1407	3202	869	663	119	10	.	2679
1.7	8.99	.	20	1140	1407	3202	869	663	119	10	.	2679
1.8	9.49	.	20	1140	1407	3202	869	663	119	10	.	2679
1.9	9.99	.	20	1140	1407	3202	869	663	119	10	.	2679
2.0	10.49	.	20	1140	1407	3202	869	663	119	10	.	2679
2.1	10.99	.	20	1140	1407	3202	869	663	119	10	.	2679
2.2	11.49	.	20	1140	1407	3202	869	663	119	10	.	2679
2.3	11.99	.	20	1140	1407	3202	869	663	119	10	.	2679
2.4	12.49	.	20	1140	1407	3202	869	663	119	10	.	2679
2.5	12.99	.	20	1140	1407	3202	869	663	119	10	.	2679
2.6	13.49	.	20	1140	1407	3202	869	663	119	10	.	2679
2.7	13.99	.	20	1140	1407	3202	869	663	119	10	.	2679
2.8	14.49	.	20	1140	1407	3202	869	663	119	10	.	2679
2.9	14.99	.	20	1140	1407	3202	869	663	119	10	.	2679
3.0	15.49	.	20	1140	1407	3202	869	663	119	10	.	2679
3.1	15.99	.	20	1140	1407	3202	869	663	119	10	.	2679
3.2	16.49	.	20	1140	1407	3202	869	663	11			

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	.	.	10	3	.	.	.	.	.	.	17
0.50-1.00	15	30	11	.	.	.	.	.	.	.	56
1.01-1.50	3	63	35	1	10	.	.	.	.	.	113
1.51-2.00	.	27	61	22	8	.	.	.	.	.	160
2.01-2.50	.	5	87	34	3	.	.	.	.	.	149
2.51-3.00	.	.	92	29	11	.	.	.	.	.	143
3.01-3.50	.	.	10	13	11	.	.	.	.	.	37
3.51-4.00	.	.	1	.	3	.	.	.	.	.	7
4.01-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	23	226	310	102	46	20	0	0	0	0	434

MEAN HS(M) = 2.90 LARGEST HS(M) = 5.78 MEAN TP(SEC) = 8.6 NUMBER OF CASES = 434

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.00	0
1.01-1.50	8	.	.	.	.	.	.	.	.	.	8
1.51-2.00	0
2.01-2.50	0
2.51-3.00	0
3.01-3.50	0
3.51-4.00	0
4.01-4.99	0
5.00+	0
TOTAL	8	0	0	0	0	0	0	0	0	0	8

MEAN HS(M) = 1.68 LARGEST HS(M) = 1.80 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 8

PHASE 3 ST. 114 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.58N/121.96W LAT. LON. END= 36.45N/121.93W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0
0.50-1.00	0
1.01-1.50	0
1.51-2.00	0
2.01-2.50	0
2.51-3.00	0
3.01-3.50	0
3.51-4.00	0
4.01-4.99	0
5.00+	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 114 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 36.58N/121.26W LAT. LON. END= 36.45N/121.93W
 SHORELINE ANGLE = 163.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.00-0.49	214	18	310	82	41	113	3	3	...	...	681
0.50-0.99	157	200	280	399	259	287	17	1	...	...	232
1.00-1.49	...	200	136	401	259	287	17	1	...	...	174
1.50-1.99	...	...	75	192	259	287	17	1	...	...	119
2.00-2.49	...	...	40	61	259	287	17	1	...	...	73
2.50-2.99	...	...	16	22	259	287	17	1	...	...	53
3.00-3.49	...	...	4	7	259	287	17	1	...	...	33
3.50-3.99	...	...	...	...	259	287	17	1	...	...	18
4.00-4.49	...	...	...	...	259	287	17	1	...	...	16
4.50-4.99	...	...	...	...	259	287	17	1	...	...	16
5.00-5.49	...	...	...	...	259	287	17	1	...	...	16
5.50-5.99	...	...	...	...	259	287	17	1	...	...	16
TOTAL	425	1288	1631	1168	1772	2145	1306	220	5	0	58440

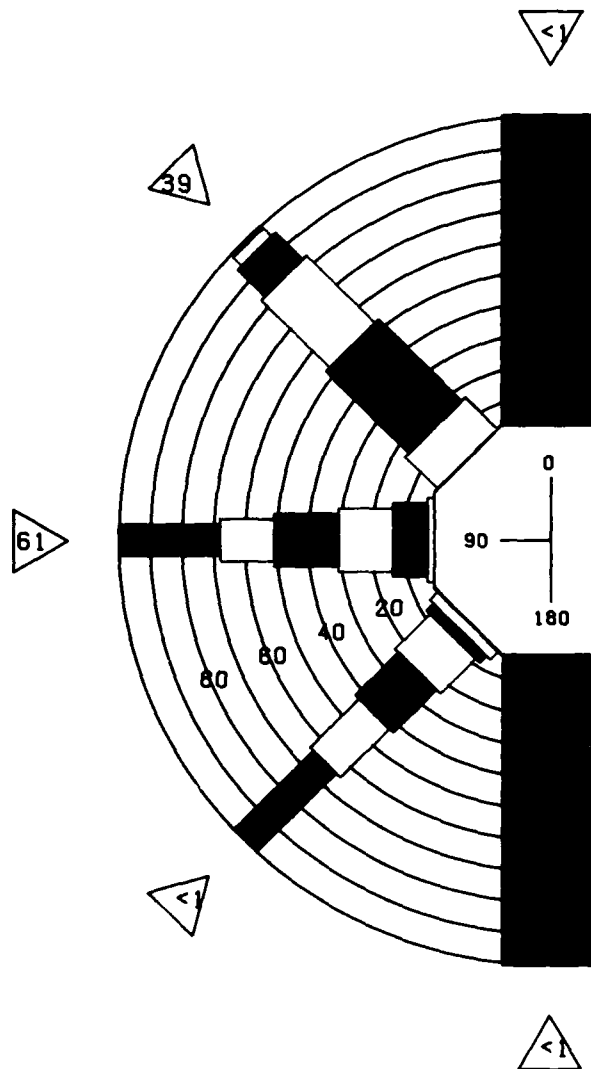
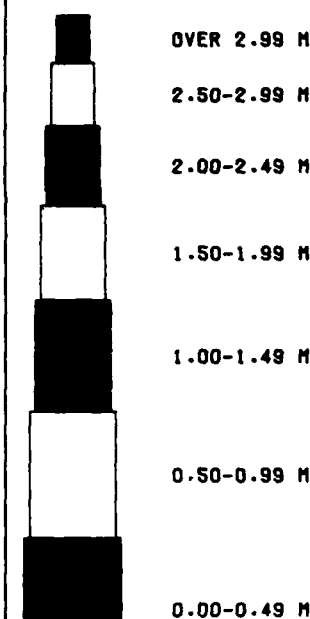
MEAN HS(M) = 2.21 LARGEST HS(M) = 7.15 MEAN TP(SEC) = 10.7 TOTAL CASES = 58440

STATION 114

20 YEARS

SHORELINE ANGLE = 163°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 114 (36.58N/ 121.96W TO 36.45N/ 121.93W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	3.1	3.2	2.6	2.3	1.8	1.7	1.5	1.3	1.4	1.9	2.6	3.2	
1976													
1977													
1978													
1979													
1980													
1981													
1982													
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2090													
2091													
2092													
2093													
2094													
2095													
2096													
2097													
2098													
2099													
2100													

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 114 (36.58N/ 121.96W TO 36.45N/ 121.93W)

YEAR	MONTH											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1975	3.1	3.2	2.6	2.3	1.8	1.7	1.5	1.3	1.4	1.9	2.6	3.2
1976												
1977												
1978												
1979												
1980												
1981												
1982												
1983												
1984												
1985												
1986												
1987												
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2007												
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2009												
2010												
2011												
2012												
2013												
2014												
2015												
2016												
2017												
2018												
2019												
2020												
2021												

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 36.45N/121.93W LAT. LON. END = 36.28N/121.91W
 SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00-5.49	0	0	0	0	0	0	0	0	0	0	0
5.50-5.99	0	0	0	0	0	0	0	0	0	0	0
6.00-6.49	0	0	0	0	0	0	0	0	0	0	0
6.50-6.99	0	0	0	0	0	0	0	0	0	0	0
7.00-7.49	0	0	0	0	0	0	0	0	0	0	0
7.50-7.99	0	0	0	0	0	0	0	0	0	0	0
8.00-8.49	0	0	0	0	0	0	0	0	0	0	0
8.50-8.99	0	0	0	0	0	0	0	0	0	0	0
9.00-9.49	0	0	0	0	0	0	0	0	0	0	0
9.50-9.99	0	0	0	0	0	0	0	0	0	0	0
10.00-10.49	0	0	0	0	0	0	0	0	0	0	0
10.50-10.99	0	0	0	0	0	0	0	0	0	0	0
11.00-11.49	0	0	0	0	0	0	0	0	0	0	0
11.50-11.99	0	0	0	0	0	0	0	0	0	0	0
12.00-12.49	0	0	0	0	0	0	0	0	0	0	0
12.50-12.99	0	0	0	0	0	0	0	0	0	0	0
13.00-13.49	0	0	0	0	0	0	0	0	0	0	0
13.50-13.99	0	0	0	0	0	0	0	0	0	0	0
14.00-14.49	0	0	0	0	0	0	0	0	0	0	0
14.50-14.99	0	0	0	0	0	0	0	0	0	0	0
15.00-15.49	0	0	0	0	0	0	0	0	0	0	0
15.50-15.99	0	0	0	0	0	0	0	0	0	0	0
16.00-16.49	0	0	0	0	0	0	0	0	0	0	0
16.50-16.99	0	0	0	0	0	0	0	0	0	0	0
17.00-17.49	0	0	0	0	0	0	0	0	0	0	0
17.50-17.99	0	0	0	0	0	0	0	0	0	0	0
18.00-18.49	0	0	0	0	0	0	0	0	0	0	0
18.50-18.99	0	0	0	0	0	0	0	0	0	0	0
19.00-19.49	0	0	0	0	0	0	0	0	0	0	0
19.50-19.99	0	0	0	0	0	0	0	0	0	0	0
20.00-20.49	0	0	0	0	0	0	0	0	0	0	0
20.50-20.99	0	0	0	0	0	0	0	0	0	0	0
21.00-21.49	0	0	0	0	0	0	0	0	0	0	0
21.50-21.99	0	0	0	0	0	0	0	0	0	0	0
22.00-22.49	0	0	0	0	0	0	0	0	0	0	0
22.50-22.99	0	0	0	0	0	0	0	0	0	0	0
23.00-23.49	0	0	0	0	0	0	0	0	0	0	0
23.50-23.99	0	0	0	0	0	0	0	0	0	0	0
24.00-24.49	0	0	0	0	0	0	0	0	0	0	0
24.50-24.99	0	0	0	0	0	0	0	0	0	0	0
25.00-25.49	0	0	0	0	0	0	0	0	0	0	0
25.50-25.99	0	0	0	0	0	0	0	0	0	0	0
26.00-26.49	0	0	0	0	0	0	0	0	0	0	0
26.50-26.99	0	0	0	0	0	0	0	0	0	0	0
27.00-27.49	0	0	0	0	0	0	0	0	0	0	0
27.50-27.99	0	0	0	0	0	0	0	0	0	0	0
28.00-28.49	0	0	0	0	0	0	0	0	0	0	0
28.50-28.99	0	0	0	0	0	0	0	0	0	0	0
29.00-29.49	0	0	0	0	0	0	0	0	0	0	0
29.50-29.99	0	0	0	0	0	0	0	0	0	0	0
30.00-30.49	0	0	0	0	0	0	0	0	0	0	0
30.50-30.99	0	0	0	0	0	0	0	0	0	0	0
31.00-31.49	0	0	0	0	0	0	0	0	0	0	0
31.50-31.99	0	0	0	0	0	0	0	0	0	0	0
32.00-32.49	0	0	0	0	0	0	0	0	0	0	0
32.50-32.99	0	0	0	0	0	0	0	0	0	0	0
33.00-33.49	0	0	0	0	0	0	0	0	0	0	0
33.50-33.99	0	0	0	0	0	0	0	0	0	0	0
34.00-34.49	0	0	0	0	0	0	0	0	0	0	0
34.50-34.99	0	0	0	0	0	0	0	0	0	0	0
35.00-35.49	0	0	0	0	0	0	0	0	0	0	0
35.50-35.99	0	0	0	0	0	0	0	0	0	0	0
36.00-36.49	0	0	0	0	0	0	0	0	0	0	0
36.50-36.99	0	0	0	0	0	0	0	0	0	0	0
37.00-37.49	0	0	0	0	0	0	0	0	0	0	0
37.50-37.99	0	0	0	0	0	0	0	0	0	0	0
38.00-38.49	0	0	0	0	0	0	0	0	0	0	0
38.50-38.99	0	0	0	0	0	0	0	0	0	0	0
39.00-39.49	0	0	0	0	0	0	0	0	0	0	0
39.50-39.99	0	0	0	0	0	0	0	0	0	0	0
40.00-40.49	0	0	0	0	0	0	0	0	0	0	0
40.50-40.99	0	0	0	0	0	0	0	0	0	0	0
41.00-41.49	0	0	0	0	0	0	0	0	0	0	0
41.50-41.99	0	0	0	0	0	0	0	0	0	0	0
42.00-42.49	0	0	0	0	0	0	0	0	0	0	0
42.50-42.99	0	0	0	0	0	0	0	0	0	0	0
43.00-43.49	0	0	0	0	0	0	0	0	0	0	0
43.50-43.99	0	0	0	0	0	0	0	0	0	0	0
44.00-44.49	0	0	0	0	0	0	0	0	0	0	0
44.50-44.99	0	0	0	0	0	0	0	0	0	0	0
45.00-45.49	0	0	0	0	0	0	0	0	0	0	0
45.50-45.99	0	0	0	0	0	0	0	0	0	0	0
46.00-46.49	0	0	0	0	0	0	0	0	0	0	0
46.50-46.99	0	0	0	0	0	0	0	0	0	0	0
47.00-47.49	0	0	0	0	0	0	0	0	0	0	0
47.50-47.99	0	0	0	0	0	0	0	0	0	0	0
48.00-48.49	0	0	0	0	0	0	0	0	0	0	0
48.50-48.99	0	0	0	0	0	0	0	0	0	0	0
49.00-49.49	0	0	0	0	0	0	0	0	0	0	0
49.50-49.99	0	0	0	0	0	0	0	0	0	0	0
50.00-50.49	0	0	0	0	0	0	0	0	0	0	0
50.50-50.99	0	0	0	0	0	0	0	0	0	0	0
51.00-51.49	0	0	0	0	0	0	0	0	0	0	0
51.50-51.99	0	0	0	0	0	0	0	0	0	0	0
52.00-52.49	0	0	0	0	0	0	0	0	0	0	0
52.50-52.99	0	0	0	0	0	0	0	0	0	0	0
53.00-53.49	0	0	0	0	0	0	0	0	0	0	0
53.50-53.99	0	0	0	0	0	0	0	0	0	0	0
54.00-54.49	0	0	0	0	0	0	0	0	0	0	0
54.50-54.99	0	0	0	0	0	0	0	0	0	0	0
55.00-55.49	0	0	0	0	0	0	0	0	0	0	0
55.50-55.99	0	0	0	0	0	0	0	0	0	0	0
56.00-56.49	0	0	0	0	0	0	0	0	0	0	0
56.50-56.99	0	0	0	0	0	0	0	0	0	0	0
57.00-57.49	0	0	0	0	0	0	0	0	0	0	0
57.50-57.99	0	0	0	0	0	0	0	0	0	0	0
58.00-58.49	0	0	0	0	0	0	0	0	0	0	0
58.50-58.99	0	0	0	0	0	0	0	0	0	0	0
59.00-59.49	0	0	0	0	0	0	0	0	0	0	0
59.50-59.99	0	0	0	0	0	0	0	0	0	0	0
60.00-60.49	0	0	0	0	0	0	0	0	0	0	0
60.50-60.99	0	0	0	0	0	0	0	0	0	0	0
61.00-61.49	0	0	0	0	0	0	0	0	0	0	0
61.50-61.99	0	0	0	0	0	0	0	0	0	0	0
62.00-62.49	0	0	0	0	0	0	0	0	0	0	0
62.50-62.99	0	0	0	0	0	0	0	0	0	0	0
63.00-63.49	0	0	0	0	0	0	0	0	0	0	0
63.50-63.99	0	0	0	0	0	0	0	0	0	0	0
64.00-64.49	0	0	0	0	0	0	0	0	0	0	0
64.50-64.99	0	0	0	0	0	0	0	0	0	0	0
65.00-65.49	0	0	0	0	0	0	0	0	0	0	0
65.50-65.99	0	0	0	0	0	0	0	0	0	0	0
66.00-66.49	0	0	0	0	0	0	0	0	0	0	0
66.50-66.99	0	0	0	0	0	0	0	0	0	0	0
67.00-67.49	0	0	0	0	0	0	0	0	0	0	0
67.50-67.99	0	0	0	0	0	0	0	0	0	0	0
68.00-68.49	0	0	0	0	0						

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
 SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	12	226	332	125	59	31	0	0	0	0	470

MEAN HS(M) = 2.89 LARGEST HS(M) = 5.62 MEAN TP(SEC) = 8.8 NUMBER OF CASES = 470

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
 SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	9	3	0	0	0	0	0	0	0	0	0

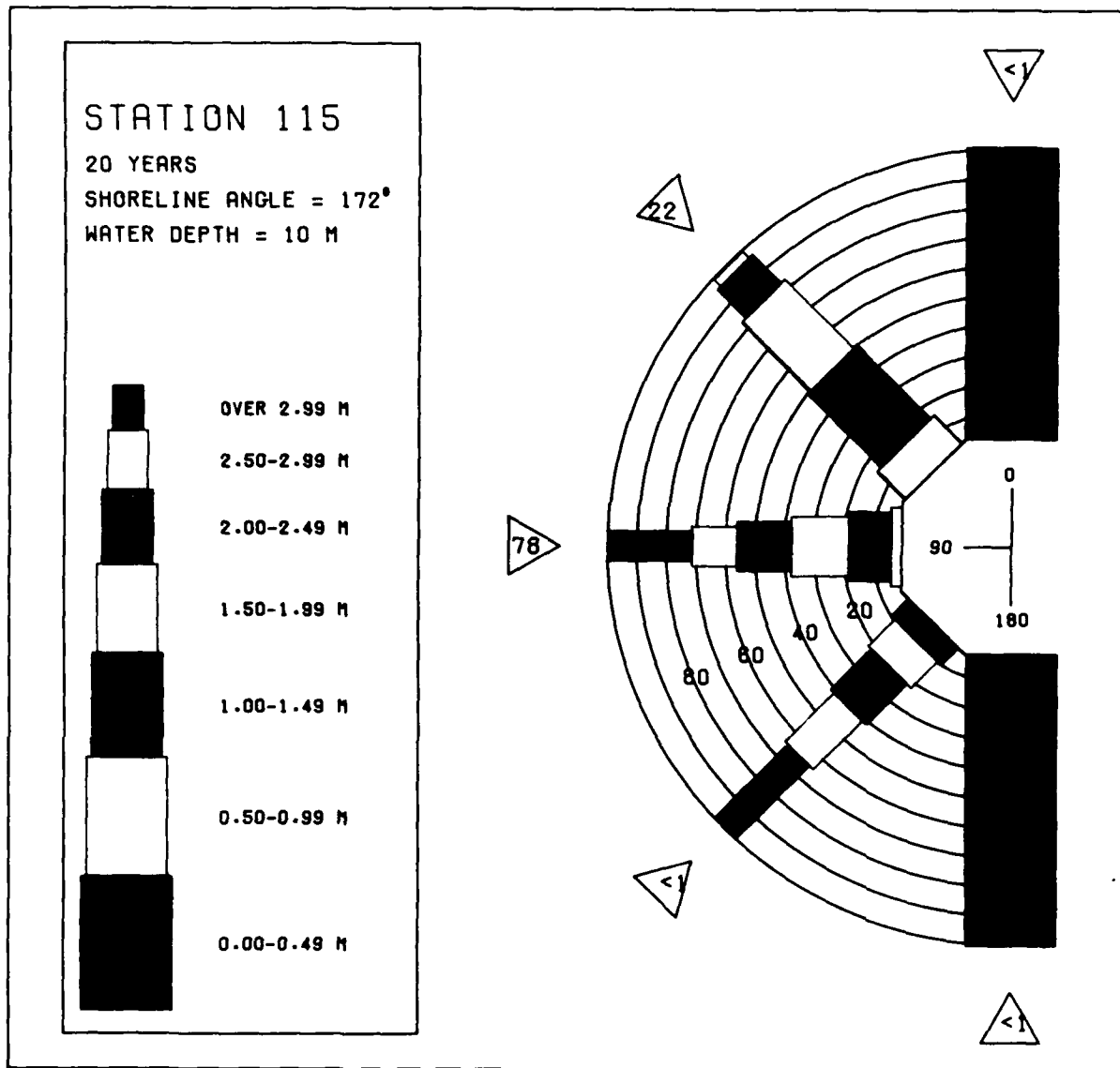
MEAN HS(M) = 1.67 LARGEST HS(M) = 1.93 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 8

PHASE 3 ST. 115 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.45N/121.93W LAT. LON. END= 36.28N/121.91W
 SHORELINE ANGLE = 172.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	1	.	.	.	.	.	.	.	.	.	1
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	1	0	0	0	0	0	0	0	0	0	1

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.04 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 115 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START = 36.45N/121.93W LAT. LONG. END = 36.28N/121.91W
SHORELINE ANGLE = 172.0 (DEG AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 115 (36.45N/ 121.93W TO 36.28N/ 121.91W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	3.2	3.3	2.8	2.4	1.9	1.7	1.5	1.4	1.4	2.0	2.7	3.3	
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 115 (36.45N/ 121.93W TO 36.28N/ 121.91W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956													
1957													
1958													
1959													
1960													
1961													
1962													
1963													
1964													
1965													
1966													
1967													
1968													
1969													
1970													
1971													
1972													
1973													
1974													
1975													

20 YR. STATISTICS FOR PACIFIC STATION 115 (36.45N/ 121.93W TO 36.28N/ 121.91W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.4
MEAN PERIOD	(SECONDS)	6.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DIRECTIONS)	100-120
STANDARD DEVIATION OF WAVE HGT	(METERS)	0.4
STANDARD DEVIATION OF WAVE PER	(SECONDS)	0.4
LARGEST WAVE HS	(METERS)	1.0
WAVE ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	100-120
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DIRECTIONS)	100-120
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022418

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
LAT. LONG. START = 36.28N/121.91W LAT. LONG. END = 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

MEAN HS(M) = 0.24 LARGEST HS(M) = 0.44 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 8

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
LAT. LONG. START = 36.28N/121.91W LAT. LONG. END = 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492	1493	1494

MEAN HS(M) = 1.01 LARGEST HS(M) = 3.09 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 11581

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
LAT. LONG. START= 36.28N/121.91W LAT. LONG. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(1/SECONDS)										TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		4.6-4.9	5.0-5.4	5.5-5.9	6.0-6.4	6.5-6.9	7.0-7.4	7.5-7.9	8.0-8.4	8.5-8.9	9.0-9.4	9.5-9.9	10.0-10.4	10.5-10.9	11.0-11.4	11.5-11.9	12.0-12.4	12.5-12.9	13.0-13.4	13.5-13.9	14.0-14.4	14.5-14.9	15.0-15.4	15.5-15.9	16.0-16.4	16.5-16.9	17.0-17.4	17.5-17.9	18.0-18.4	18.5-18.9	19.0-19.4	19.5-19.9	20.0-20.4	20.5-20.9	21.0-21.4	21.5-21.9	22.0-22.4	22.5-22.9	23.0-23.4	23.5-23.9	24.0-24.4	24.5-24.9	25.0-25.4	25.5-25.9	26.0-26.4	26.5-26.9	27.0-27.4	27.5-27.9	28.0-28.4	28.5-28.9	29.0-29.4	29.5-29.9	30.0-30.4	30.5-30.9	31.0-31.4	31.5-31.9	32.0-32.4	32.5-32.9	33.0-33.4	33.5-33.9	34.0-34.4	34.5-34.9	35.0-35.4	35.5-35.9	36.0-36.4	36.5-36.9	37.0-37.4	37.5-37.9	38.0-38.4	38.5-38.9	39.0-39.4	39.5-39.9	40.0-40.4	40.5-40.9	41.0-41.4	41.5-41.9	42.0-42.4	42.5-42.9	43.0-43.4	43.5-43.9	44.0-44.4	44.5-44.9	45.0-45.4	45.5-45.9	46.0-46.4	46.5-46.9	47.0-47.4	47.5-47.9	48.0-48.4	48.5-48.9	49.0-49.4	49.5-49.9	50.0-50.4	50.5-50.9	51.0-51.4	51.5-51.9	52.0-52.4	52.5-52.9	53.0-53.4	53.5-53.9	54.0-54.4	54.5-54.9	55.0-55.4	55.5-55.9	56.0-56.4	56.5-56.9	57.0-57.4	57.5-57.9	58.0-58.4	58.5-58.9	59.0-59.4	59.5-59.9	60.0-60.4	60.5-60.9	61.0-61.4	61.5-61.9	62.0-62.4	62.5-62.9	63.0-63.4	63.5-63.9	64.0-64.4	64.5-64.9	65.0-65.4	65.5-65.9	66.0-66.4	66.5-66.9	67.0-67.4	67.5-67.9	68.0-68.4	68.5-68.9	69.0-69.4	69.5-69.9	70.0-70.4	70.5-70.9	71.0-71.4	71.5-71.9	72.0-72.4	72.5-72.9	73.0-73.4	73.5-73.9	74.0-74.4	74.5-74.9	75.0-75.4	75.5-75.9	76.0-76.4	76.5-76.9	77.0-77.4	77.5-77.9	78.0-78.4	78.5-78.9	79.0-79.4	79.5-79.9	80.0-80.4	80.5-80.9	81.0-81.4	81.5-81.9	82.0-82.4	82.5-82.9	83.0-83.4	83.5-83.9	84.0-84.4	84.5-84.9	85.0-85.4	85.5-85.9	86.0-86.4	86.5-86.9	87.0-87.4	87.5-87.9	88.0-88.4	88.5-88.9	89.0-89.4	89.5-89.9	90.0-90.4	90.5-90.9	91.0-91.4	91.5-91.9	92.0-92.4	92.5-92.9	93.0-93.4	93.5-93.9	94.0-94.4	94.5-94.9	95.0-95.4	95.5-95.9	96.0-96.4	96.5-96.9	97.0-97.4	97.5-97.9	98.0-98.4	98.5-98.9	99.0-99.4	99.5-99.9	100.0-100.4	100.5-100.9	101.0-101.4	101.5-101.9	102.0-102.4	102.5-102.9	103.0-103.4	103.5-103.9	104.0-104.4	104.5-104.9	105.0-105.4	105.5-105.9	106.0-106.4	106.5-106.9	107.0-107.4	107.5-107.9	108.0-108.4	108.5-108.9	109.0-109.4	109.5-109.9	110.0-110.4	110.5-110.9	111.0-111.4	111.5-111.9	112.0-112.4	112.5-112.9	113.0-113.4	113.5-113.9	114.0-114.4	114.5-114.9	115.0-115.4	115.5-115.9	116.0-116.4	116.5-116.9	117.0-117.4	117.5-117.9	118.0-118.4	118.5-118.9	119.0-119.4	119.5-119.9	120.0-120.4	120.5-120.9	121.0-121.4	121.5-121.9	122.0-122.4	122.5-122.9	123.0-123.4	123.5-123.9	124.0-124.4	124.5-124.9	125.0-125.4	125.5-125.9	126.0-126.4	126.5-126.9	127.0-127.4	127.5-127.9	128.0-128.4	128.5-128.9	129.0-129.4	129.5-129.9	130.0-130.4	130.5-130.9	131.0-131.4	131.5-131.9	132.0-132.4	132.5-132.9	133.0-133.4	133.5-133.9	134.0-134.4	134.5-134.9	135.0-135.4	135.5-135.9	136.0-136.4	136.5-136.9	137.0-137.4	137.5-137.9	138.0-138.4	138.5-138.9	139.0-139.4	139.5-139.9	140.0-140.4	140.5-140.9	141.0-141.4	141.5-141.9	142.0-142.4	142.5-142.9	143.0-143.4	143.5-143.9	144.0-144.4	144.5-144.9	145.0-145.4	145.5-145.9	146.0-146.4	146.5-146.9	147.0-147.4	147.5-147.9	148.0-148.4	148.5-148.9	149.0-149.4	149.5-149.9	150.0-150.4	150.5-150.9	151.0-151.4	151.5-151.9	152.0-152.4	152.5-152.9	153.0-153.4	153.5-153.9	154.0-154.4	154.5-154.9	155.0-155.4	155.5-155.9	156.0-156.4	156.5-156.9	157.0-157.4	157.5-157.9	158.0-158.4	158.5-158.9	159.0-159.4	159.5-159.9	160.0-160.4	160.5-160.9	161.0-161.4	161.5-161.9	162.0-162.4	162.5-162.9	163.0-163.4	163.5-163.9	164.0-164.4	164.5-164.9	165.0-165.4	165.5-165.9	166.0-166.4	166.5-166.9	167.0-167.4	167.5-167.9	168.0-168.4	168.5-168.9	169.0-169.4	169.5-169.9	170.0-170.4	170.5-170.9	171.0-171.4	171.5-171.9	172.0-172.4	172.5-172.9	173.0-173.4	173.5-173.9	174.0-174.4	174.5-174.9	175.0-175.4	175.5-175.9	176.0-176.4	176.5-176.9	177.0-177.4	177.5-177.9	178.0-178.4	178.5-178.9	179.0-179.4	179.5-179.9	180.0-180.4	180.5-180.9	181.0-181.4	181.5-181.9	182.0-182.4	182.5-182.9	183.0-183.4	183.5-183.9	184.0-184.4	184.5-184.9	185.0-185.4	185.5-185.9	186.0-186.4	186.5-186.9	187.0-187.4	187.5-187.9	188.0-188.4	188.5-188.9	189.0-189.4	189.5-189.9	190.0-190.4	190.5-190.9	191.0-191.4	191.5-191.9	192.0-192.4	192.5-192.9	193.0-193.4	193.5-193.9	194.0-194.4	194.5-194.9	195.0-195.4	195.5-195.9	196.0-196.4	196.5-196.9	197.0-197.4	197.5-197.9	198.0-198.4	198.5-198.9	199.0-199.4	199.5-199.9	200.0-200.4	200.5-200.9	201.0-201.4	201.5-201.9	202.0-202.4	202.5-202.9	203.0-203.4	203.5-203.9	204.0-204.4	204.5-204.9	205.0-205.4	205.5-205.9	206.0-206.4	206.5-206.9	207.0-207.4	207.5-207.9	208.0-208.4	208.5-208.9	209.0-209.4	209.5-209.9	210.0-210.4	210.5-210.9	211.0-211.4	211.5-211.9	212.0-212.4	212.5-212.9	213.0-213.4	213.5-213.9	214.0-214.4	214.5-214.9	215.0-215.4	215.5-215.9	216.0-216.4	216.5-216.9	217.0-217.4	217.5-217.9	218.0-218.4	218.5-218.9	219.0-219.4	219.5-219.9	220.0-220.4	220.5-220.9	221.0-221.4	221.5-221.9	222.0-222.4	222.5-222.9	223.0-223.4	223.5-223.9	224.0-224.4	224.5-224.9	225.0-225.4	225.5-225.9	226.0-226.4	226.5-226.9	227.0-227.4	227.5-227.9	228.0-228.4	228.5-228.9	229.0-229.4	229.5-229.9	230.0-230.4	230.5-230.9	231.0-231.4	231.5-231.9	232.0-232.4	232.5-232.9	233.0-233.4	233.5-233.9	234.0-234.4	234.5-234.9	235.0-235.4	235.5-235.9	236.0-236.4	236.5-236.9	237.0-237.4	237.5-237.9	238.0-238.4	238.5-238.9	239.0-239.4	239.5-239.9	240.0-240.4	240.5-240.9	241.0-241.4	241.5-241.9	242.0-242.4	242.5-242.9	243.0-243.4	243.5-243.9	244.0-244.4	244.5-244.9	245.0-245.4	245.5-245.9	246.0-246.4	246.5-246.9	247.0-247.4	247.5-247.9	248.0-248.4	248.5-248.9	249.0-249.4	249.5-249.9	250.0-250.4	250.5-250.9	251.0-251.4	251.5-251.9	252.0-252.4	252.5-252.9	253.0-253.4	253.5-253.9	254.0-254.4	254.5-254.9	255.0-255.4	255.5-255.9	256.0-256.4	256.5-256.9	257.0-257.4	257.5-257.9	258.0-258.4	258.5-258.9	259.0-259.4	259.5-259.9	260.0-260.4	260.5-260.9	261.0-261.4	261.5-261.9	262.0-262.4	262.5-262.9	263.0-263.4	263.5-263.9	264.0-264.4	264.5-264.9	265.0-265.4	265.5-265.9	266.0-266.4	266.5-266.9	267.0-267.4	267.5-267.9	268.0-268.4	268.5-268.9	269.0-269.4	269.5-269.9	270.0-270.4	270.5-270.9	271.0-271.4	271.5-271.9	272.0-272.4	272.5-272.9	273.0-273.4	273.5-273.9	274.0-274.4	274.5-274.9	275.0-275.4	275.5-275.9	276.0-276.4	276.5-276.9	277.0-277.4	277.5-277.9	278.0-278.4	278.5-278.9	279.0-279.4	279.5-279.9	280.0-280.4	280.5-280.9	281.0-281.4	281.5-281.9	282.0-282.4	282.5-282.9	283.0-283.4	283.5-283.9	284.0-284.4	284.5-284.9	285.0-285.4	285.5-285.9	286.0-286.4	286.5-286.9	287.0-287.4	287.5-287.9	288.0-288.4	288.5-288.9	289.0-289.4	289.5-289.9	290.0-290.4	290.5-290.9	291.0-291.4	291.5-291.9	292.0-292.4	292.5-292.9	293.0-293.4	293.5-293.9	294.0-294.4	294.5-294.9	295.0-295.4	295.5-295.9	296.0-296.4	296.5-296.9	297.0-297.4	297.5-297.9	298.0-298.4	298.5-298.9	299.0-299.4	299.5-299.9	300.0-300.4	300.5-300.9	301.0-301.4	301.5-301.9	302.0-302.4	302.5-302.9	303.0-303.4	303.5-303.9	304.0-304.4	304.5-304.9	305.0-305.4	305.5-305.9	306.0-306.4	306.5-306.9	307.0-307.4	307.5-307.9	308.0-308.4	308.5-308.9	309.0-309.4	309.5-309.9	310.0-310.4	310.5-310.9	311.0-311.4	311.5-311.9	312.0-312.4	312.5-312.9	313.0-313.4	313.5-313.9	314.0-314.4	314.5-314.9	315.0-315.4	315.5-315.9	316.0-316.4	316.5-316.9	317.0-317.4	317.5-317.9	318.0-318.4	318.5-318.9	319.0-319.4	319.5-319.9	320.0-320.4	320.5-320.9	321.0-321.4	321.5-321.9	322.0-322.4	322.5-322.9	323.0-323.4	323.5-323.9	324.0-324.4	324.5-324.9	325.0-325.4	325.5-325.9	326.0-326.4	326.5-326.9	327.0-327.4	327.5-327.9	328.0-328.4	328.5-328.9	329.0-329.4	329.5-329.9	330.0-330.4	330.5-330.9	331.0-331.4	331.5-331.9	332.0-332.4	332.5-332.9	333.0-333.4	333.5-333.9	334.0-334.4	334.5-334.9	335.0-335.4	335.5-335.9	336.0-336.4	336.5-336.9	337.0-337.4	337.5-337.9	338.0-338.4	338.5-338.9	339.0-339.4	339.5-339.9	340.0-340.4	340.5-340.9	341.0-341.4	341.5-341.9	342.0-342.4	342.5-342.9	343.0-343.4	343.5-343.9	344.0-344.4	344.5-344.9	345.0-345.4	345.5-345.9	346.0-346.4	346.5-346.9	347.0-347.4	347.5-347.9	348.0-348.4	348.5-348.9	349.0-349.4	349.5-349.9	350.0-350.4	350.5-350.9	351.0-351.4	351.5-351.9	352.0-352.4	352.5-352.9	353.0-353.4	353.5-353.9	354.0-354.4	354.5-354.9	355.0-355.4	355.5-355.9	356.0-356.4	356.5-356.9	357.0-357.4	357.5-357.9	358.0-358.4	358.5-358.9	359.0-359.4	359.5-359.9	360.0-360.4	360.5-360.9	361.0-361.4	361.5-361.9	362.0-362.4	362.5-362.9	363.0-363.4	363.5-363.9	364.0-364.4	364.5-364.9	365.0-365.4	365.5-365.9	366.0-366.4	366.5-366.9	367.0-367.4	367.5-367.9	368.0-368.4	368.5-368.9	369.0-369.4	369.5-369.9	370.0-370.4	370.5-370.9	371.0-371.4	371.5-371.9	372.0-372.4	372.5-372.9	373.0-373.4	373.5-373.9	374.0-374.4	374.5-374.9	375.0-375.4	375.5-375.9	376.0-376.4	376.5-376.9	377.0-377.4	377.5-377.9	378.0-378.4	378.5-378.9	379.0-379.4	379.5-379.9	380.0-380.4	380.5-380.9	381.0-381.4	381.5-381.9	382.0-382.4	382.5-382.9	383.0-383.4	383.5-383.9	384.0-384.4	384.5-384.9	385.0-385.4	385.5-385.9	386.0-386.4	386.5-386.9	387.0-387.4	387.5-387.9	388.0-388.4	388.5-388.9	389.0-389.4	389.5-389.9	390.0-390.4	390.5-390.9	391.0-391.4	391.5-391.9	392.0-392.4	392.5-392.9	393.0-393.4	393.5-393.9	394.0-394.4	394.5-394.9	395.0-395.4	395.5-395.9	396.0-396.4	396.5-396.9	397.0-397.4	397.5-397.9	398.0-398.4	398.5-398.9	399.0-399.4	399.5-399.9	400.0-400.4	400.5-400.9	401.0-401.4	401.5-401.9	402.0-402.4	40

MEAN HS(M) = 1.40 LARGEST HS(M) = 5.43 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 45262

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
LAT. LONG. START = 36.28N/121.91W LAT. LONG. END = 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

MEAN HS(M) = 2.41 LARGEST HS(M) = 5.44 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 1124

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
LAT. LONG. START= 36.28N/121.91W LAT. LONG. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	
0.0	0	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	11
0.1	1		1	5								78
0.2	2	17	1	5								73
0.3	3	59	3	11								62
0.4	4	121	7	11	3							159
0.5	5	44	10	14								130
0.6	6		11	13								71
0.7	7		12	4								16
0.8	8		30	13								0
0.9	9		3	1								0
TOTAL		246	295	157	3	0	0	0	0	0	0	0

MEAN HS(M) = 2.07 LARGEST HS(M) = 4.75 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 417

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LONG. START= 36.28N/121.91W LAT. LONG. END= 36.16N/121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

MEAN HS(M) = 0.94 LARGEST HS(M) = 1.95 MEAN TP(SEC) = 5.2 NUMBER OF CASES = 38

PHASE 3 ST. 116 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES)= 165.20 - 180.0
LAT. LONG. START= 36.28N 121.91W LAT. LONG. END= 36.16N 121.75W
SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

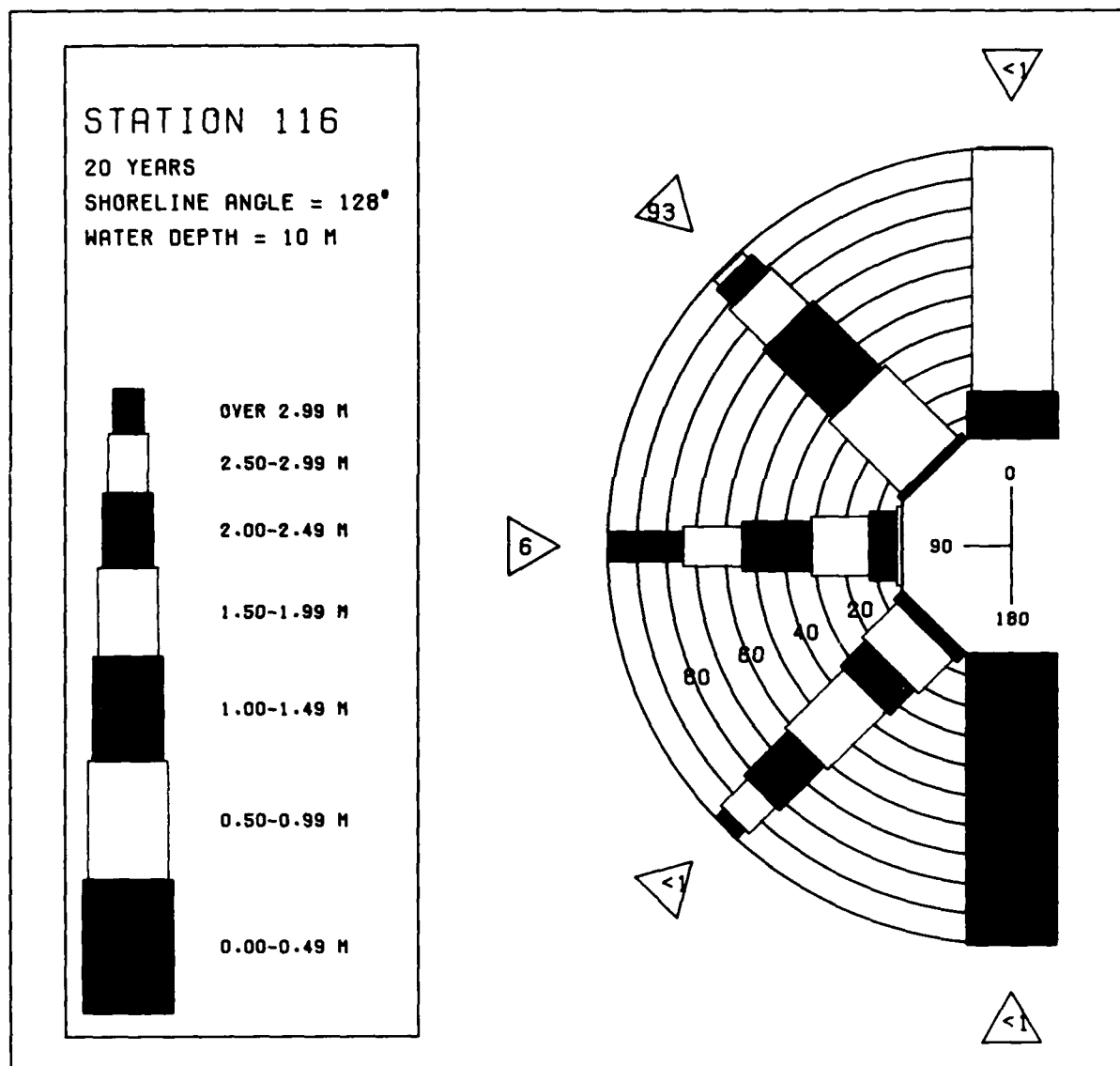
[illegible]

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 116 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 36.28N/121.91W LAT. LONG. END = 36.16N/121.75W
 SHORELINE ANGLE = 128.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0-	6.0	22.0	11.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	251
0.500	22.8	75.9	111.9	61.3	43.3	128.8	200.2	13.3	1	...	3599
1.000	22.8	75.9	111.9	61.3	43.3	128.8	200.2	13.3	1	...	3130
1.500	16.0	25.0	126.6	13.3	22.7	69.9	140.0	13.3	3	...	1792
2.000	...	12.0	11.0	13.3	4.3	24.6	44.4	13.3	1	...	886
2.500	...	1.1	1.0	1.3	1	15.3	4.4	13.3	1	...	393
3.000	...	...	...	...	...	...	...	13.3	...	...	146
3.500	...	...	...	...	...	...	...	13.3	...	...	52
4.000	...	...	...	...	...	...	...	13.3	...	...	9
4.500	...	...	...	...	...	...	...	13.3	...	...	3
5.000	...	...	...	...	...	...	...	13.3	...	...	0
TOTAL	567	1784	1788	1039	1561	1847	1179	190	6	0	

MEAN HS(M) = 1.35 LARGEST HS(M) = 5.44 MEAN TP(SEC) = 10.3 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 116 (36.28N/ 121.91W TO 36.16N/ 121.75W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1956	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1957	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1958	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1959	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1960	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1961	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1962	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1963	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1964	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1965	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1966	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1967	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1968	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1969	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1970	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1971	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1972	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1973	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1974	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1
1975	1.4	1.7	1.3	1.1	1.1	1.1	0.8	0.8	0.7	1.1	1.5	1.9	1.1

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 116 (36.28N/ 121.91W TO 36.16N/ 121.75W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
YEAR	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1956	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1957	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1958	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1959	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1960	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1961	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1962	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1963	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1964	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1965	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1966	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1967	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1968	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1969	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1970	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1971	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1972	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1973	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1974	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3
1975	3.0	3.0	2.5	2.6	2.0	2.2	1.4	2.0	1.3	2.4	2.1	2.3

20 YR. STATISTICS FOR PACIFIC STATION 116 (36.28N/ 121.91W TO 36.16N/ 121.75W)

MEAN SIGNIFICANT WAVE HEIGHT (METERS) 1.3
MEAN PEAK WAVE PERIOD (SECONDS) 10.3
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 60.0
STANDARD DEVIATION OF WAVE HS (METERS) 0.6
STANDARD DEVIATION OF WAVE TP (SECONDS) 2.7
LARGEST WAVE HS (METERS) 5.4
WAVE TP ASSOCIATED WITH LARGEST WAVE HS (SECONDS) 11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 99.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) 59021609

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	10667	1132	.	.	.	.	.	.	.	.	11799
0.50 - 0.99	3913	3304	.	.	.	.	.	.	.	.	7217
1.00 - 1.49	797	980	.	.	.	.	.	.	.	.	1777
1.50 - 1.99	10	5	.	.	.	.	.	.	.	.	59
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	15387	5470	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.49 LARGEST HS(M) = 2.35 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 12191

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	184	1546	1594	1036	117	138	159	28	.	.	3705
0.50 - 0.99	463	844	2887	4779	4130	1358	1359	828	.	.	23337
1.00 - 1.49	299	1674	2584	1617	3463	12670	11339	134	.	.	16742
1.50 - 1.99	68	1205	1084	100	1117	2262	10689	11	.	.	7694
2.00 - 2.49	1	197	184	6	355	1319	10689	1077	.	.	1954
2.50 - 2.99	.	22	1	.	83	660	10689	79	.	.	686
3.00 - 3.49	.	1	.	.	6	207	369	49	.	.	303
3.50 - 3.99	.	.	.	.	.	3	45	11	.	.	101
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	16
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	10
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1015	15246	15258	7297	9231	9540	5748	805	34	0	0

MEAN HS(M) = 1.16 LARGEST HS(M) = 5.57 MEAN TP(SEC) = 10.0 NUMBER OF CASES = 37524

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	338	18	.	.	.	.	.	.	.	.	357
0.50 - 0.99	308	136	13	6	.	.	.	.	.	.	463
1.00 - 1.49	225	273	135	35	8	6	.	.	.	.	572
1.50 - 1.99	92	420	133	133	5	10	.	.	.	.	568
2.00 - 2.49	6	304	136	222	8	8	.	.	.	.	495
2.50 - 2.99	1	126	196	29	13	11	.	.	.	.	382
3.00 - 3.49	.	44	61	34	11	3	.	.	.	.	166
3.50 - 3.99	.	.	15	11	1	3	.	.	.	.	41
4.00 - 4.49	.	.	8	3	.	3	.	.	.	.	19
4.50 - 4.99	.	.	1	.	.	6	.	.	.	.	8
5.00 +	.	.	.	.	.	.	.	.	.	.	15
TOTAL	970	1321	508	153	52	59	11	0	13	0	0

MEAN HS(M) = 1.69 LARGEST HS(M) = 5.50 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 1841

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0. - 0.49	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	399
0.50 - 0.99	282	116	1	.	.	.	.	.	.	.	433
1.00 - 1.49	316	42	75	.	.	.	.	.	.	.	479
1.50 - 1.99	347	126	6	.	.	.	.	.	.	.	279
2.00 - 2.49	92	164	20	3	.	.	.	.	.	.	208
2.50 - 2.99	6	160	42	.	.	.	.	.	.	.	83
3.00 - 3.49	.	39	13	5	.	.	.	.	.	.	23
3.50 - 3.99	.	.	10	5	.	.	.	.	.	.	15
4.00 - 4.49	.	.	1	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	1
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	1043	652	212	13	0	0	0	0	0	0	

MEAN HS(M) = 1.23 LARGEST HS(M) = 4.66 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 1129

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0. - 0.49	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	4994
0.50 - 0.99	4912	82	.	.	.	.	.	.	.	.	700
1.00 - 1.49	694	6	.	.	.	.	.	.	.	.	102
1.50 - 1.99	99	3	.	.	.	.	.	.	.	.	6
2.00 - 2.49	3	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	5708	94	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.27 LARGEST HS(M) = 1.79 MEAN TP(SEC) = 4.8 NUMBER OF CASES = 3393

PHASE 3 ST. 117 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

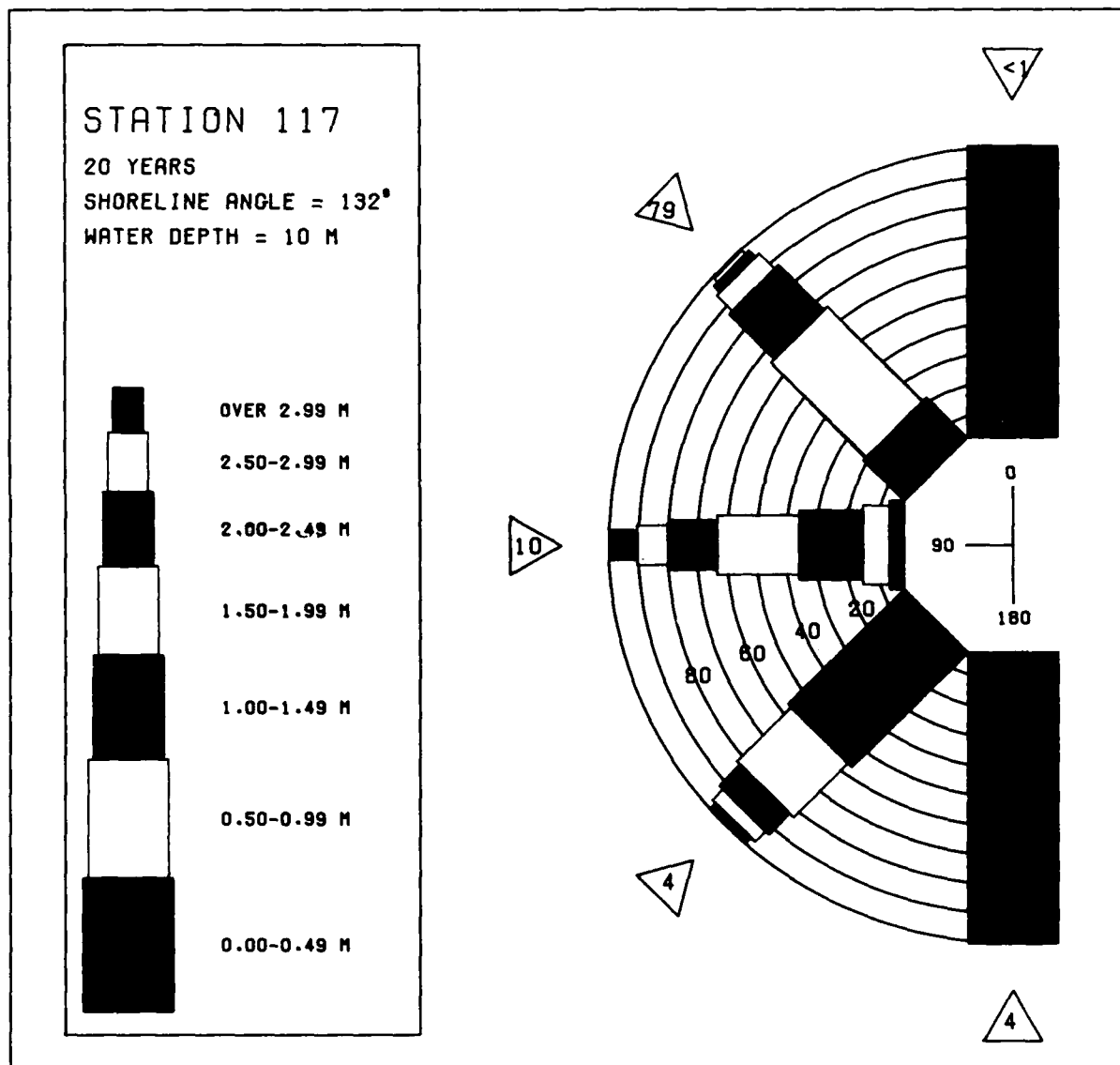
HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0. - 0.49	6.0	8.0	9.5	10.5	11.7	13.3	15.3	18.1	22.2	LONGER	583
0.50 - 0.99	583	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	583	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.02 LARGEST HS(M) = 0.05 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 341

PHASE 3 ST. 117 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 36.16N/121.75W LAT. LON. END= 36.11N/121.68W
 SHORELINE ANGLE = 132.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0	1696	289	159	23	7	1	2	2	1	1	2179
0.5	569	1193	990	498	413	135	13	13	1	1	3812
1.0	176	525	263	165	347	227	112	9	1	1	1964
1.5	26	184	112	37	112	227	168	13	1	1	880
2.0	1	62	36	12	36	132	107	24	1	1	510
2.5	1	5	2	3	9	67	105	10	1	1	238
3.0	1	1	1	1	2	21	38	7	1	1	83
3.5	1	1	1	1	1	4	23	4	1	1	33
4.0	1	1	1	1	1	1	5	1	1	1	9
4.5	1	1	1	1	1	1	1	1	1	1	1
5.0	1	1	1	1	1	1	1	1	1	1	1
5.5	1	1	1	1	1	1	1	1	1	1	1
6.0	1	1	1	1	1	1	1	1	1	1	1
TOTAL	2468	2276	1594	742	926	954	574	75	2	0	58440

MEAN HS(M) = 0.94 LARGEST HS(M) = 5.57 MEAN TP(SEC)= 8.5 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 117 (36.16N/ 121.75W TO 36.11N/ 121.68W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.5	1.0	0.9	0.9	0.8	0.8	0.7	0.8	0.6	0.7	0.7	1.3	0.9
1957	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	1.5	1.4	1.1	0.9	0.9	0.8	0.8	0.7	0.6	0.7	0.9	1.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 117 (36.16N/ 121.75W TO 36.11N/ 121.68W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1957	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1958	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1959	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1960	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1961	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1962	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1963	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1964	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1965	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1966	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1967	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1968	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1969	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1970	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1971	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1972	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1973	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1974	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1975	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3

20 YR. STATISTICS FOR PACIFIC STATION 117 (36.16N/ 121.75W TO 36.11N/ 121.68W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.9
MEAN PEAK WAVE PERIOD	(SECONDS)	8.5
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.0
LARGEST WAVE HS	(METERS)	1.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	10.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.2
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		19751230

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	0	0	0
0.2	0	0	0	0	0	0	0	0	0	0	0
0.3	0	0	0	0	0	0	0	0	0	0	0
0.4	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
0.6	0	0	0	0	0	0	0	0	0	0	0
0.7	0	0	0	0	0	0	0	0	0	0	0
0.8	0	0	0	0	0	0	0	0	0	0	0
0.9	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	0	0	0
0.2	0	0	0	0	0	0	0	0	0	0	0
0.3	0	0	0	0	0	0	0	0	0	0	0
0.4	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
0.6	0	0	0	0	0	0	0	0	0	0	0
0.7	0	0	0	0	0	0	0	0	0	0	0
0.8	0	0	0	0	0	0	0	0	0	0	0
0.9	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1090	105	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.10 LARGEST HS(M) = 2.09 MEAN TP(SEC) = 5.4 NUMBER OF CASES = 702

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	0	0	0
0.2	0	0	0	0	0	0	0	0	0	0	0
0.3	0	0	0	0	0	0	0	0	0	0	0
0.4	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
0.6	0	0	0	0	0	0	0	0	0	0	0
0.7	0	0	0	0	0	0	0	0	0	0	0
0.8	0	0	0	0	0	0	0	0	0	0	0
0.9	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2347	13661	17968	11454	17056	19405	11650	1834	2	0	0

MEAN HS(M) = 1.82 LARGEST HS(M) = 6.59 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 55760

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	0	0	0	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	0	0	0
0.2	0	0	0	0	0	0	0	0	0	0	0
0.3	0	0	0	0	0	0	0	0	0	0	0
0.4	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
0.6	0	0	0	0	0	0	0	0	0	0	0
0.7	0	0	0	0	0	0	0	0	0	0	0
0.8	0	0	0	0	0	0	0	0	0	0	0
0.9	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	63	380	208	162	228	585	653	217	110	0	0

MEAN HS(M) = 2.59 LARGEST HS(M) = 5.64 MEAN TP(SEC) = 12.1 NUMBER OF CASES = 1545

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	1	1	1	1	1	1	1	1	1	10
0.50-0.99	20	27	10	3	1	1	1	1	1	1	60
1.00-1.49	27	46	8	1	1	1	1	1	1	1	101
1.50-1.99	11	78	44	1	1	1	1	1	1	1	133
2.00-2.49	1	82	85	1	1	1	1	1	1	1	168
2.50-2.99	1	58	71	17	3	3	1	1	1	1	146
3.00-3.49	1	8	37	15	3	3	1	1	1	1	66
3.50-3.99	1	1	3	6	1	1	1	1	1	1	13
4.00-4.49	1	1	1	1	1	1	1	1	1	1	10
4.50-4.99	1	1	1	1	1	1	1	1	1	1	10
5.00+	1	1	1	1	1	1	1	1	1	1	10
TOTAL	79	299	258	42	5	7	0	0	0	0	412

MEAN HS(M) = 2.62 LARGEST HS(M) = 5.28 MEAN TP(SEC) = 7.8 NUMBER OF CASES = 412

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	1	1	1	1	1	1	1	1	1	1	10
0.50-0.99	3	1	1	1	1	1	1	1	1	1	30
1.00-1.49	1	5	1	1	1	1	1	1	1	1	16
1.50-1.99	1	1	1	1	1	1	1	1	1	1	10
2.00-2.49	1	1	1	1	1	1	1	1	1	1	10
2.50-2.99	1	1	1	1	1	1	1	1	1	1	10
3.00-3.49	1	1	1	1	1	1	1	1	1	1	10
3.50-3.99	1	1	1	1	1	1	1	1	1	1	10
4.00-4.49	1	1	1	1	1	1	1	1	1	1	10
4.50-4.99	1	1	1	1	1	1	1	1	1	1	10
5.00+	1	1	1	1	1	1	1	1	1	1	10
TOTAL	5	5	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.72 LARGEST HS(M) = 2.11 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 7

PHASE 3 ST. 118 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.11N/121.68W LAT. LON. END= 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	10	1	1	1	1	1	1	1	1	1	10
0.50-0.99	1	1	1	1	1	1	1	1	1	1	10
1.00-1.49	1	1	1	1	1	1	1	1	1	1	10
1.50-1.99	1	1	1	1	1	1	1	1	1	1	10
2.00-2.49	1	1	1	1	1	1	1	1	1	1	10
2.50-2.99	1	1	1	1	1	1	1	1	1	1	10
3.00-3.49	1	1	1	1	1	1	1	1	1	1	10
3.50-3.99	1	1	1	1	1	1	1	1	1	1	10
4.00-4.49	1	1	1	1	1	1	1	1	1	1	10
4.50-4.99	1	1	1	1	1	1	1	1	1	1	10
5.00+	1	1	1	1	1	1	1	1	1	1	10
TOTAL	10	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.04 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 6

PHASE 3 ST. 118 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 36.11N/121.68W LAT. LONG. END = 36.03N/121.63W
 SHORELINE ANGLE = 151.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.6	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.00-0.49	7	10	5	1	1	3	1	2	2	..	52
0.50-0.99	180	248	330	217	92	225	124	144	1	..	1570
1.00-1.49	1000	1440	1000	700	541	257	120	155	2	..	5786
1.50-1.99	7	14	10	7	10	44	19	30	1	..	206
2.00-2.49	..	16	17	23	107	58	12	34	1	..	211
2.50-2.99	..	..	1	3	25	13	5	22	..	..	50
3.00-3.49	..	..	..	1	5	1	..	3	..	..	33
3.50-3.99	..	..	..	..	..	..	..	4	..	..	4
4.00-4.49	..	..	..	..	..	..	..	..	..	..	6
4.50-4.99	..	..	..	..	..	..	..	..	..	..	4
5.00-5.49	..	..	..	..	..	..	..	..	..	..	56
TOTAL	358	1443	1841	1162	1725	1995	1225	200	7	0	58440

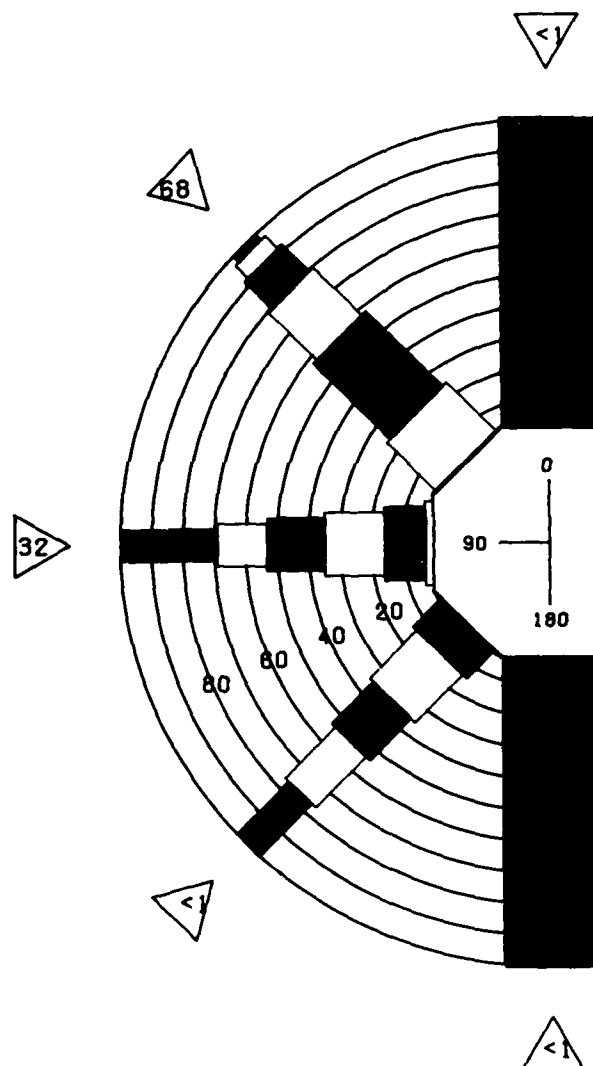
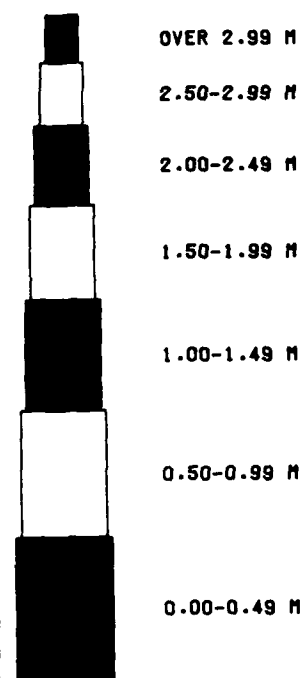
MEAN HS(M) = 1.84 LARGEST HS(M) = 6.59 MEAN TP(SEC) = 10.6 TOTAL CASES = 58440

STATION 118

20 YEARS

SHORELINE ANGLE = 151°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 118 (36.11N/ 121.68W TO 36.03N/ 121.63W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1957	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1958	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1959	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1960	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1961	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1962	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1963	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1964	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1965	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1966	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1967	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1968	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1969	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1970	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1971	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1972	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1973	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1974	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
1975	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9
MEAN	2.6	2.6	2.2	1.9	1.5	1.4	1.2	1.1	1.2	1.6	2.2	2.7	1.9

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 118 (36.11N/ 121.68W TO 36.03N/ 121.63W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1957	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1958	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1959	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1960	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1961	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1962	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1963	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1964	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1965	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1966	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1967	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1968	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1969	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1970	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1971	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1972	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1973	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1974	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
1975	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3

20 YR. STATISTICS FOR PACIFIC STATION118 (36.11N/ 121.68W TO 36.03N/ 121.63W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.8
MEAN PEAK WAVE PERIOD	(SECONDS)	10.8
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.00
STANDARD DEVIATION OF WAVE HS	(METERS)	0.90
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.66
LARGEST WAVE HS	(METERS)	16.66
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.66
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	72.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040306

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LONG. START = 36.03N/121.63W LAT. LONG. END = 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.5	0	0	0	0	0	0	0	0	0	0	0
0.5-1.0	0	0	0	0	0	0	0	0	0	0	0
1.0-1.5	0	0	0	0	0	0	0	0	0	0	0
1.5-2.0	0	0	0	0	0	0	0	0	0	0	0
2.0-2.5	0	0	0	0	0	0	0	0	0	0	0
2.5-3.0	0	0	0	0	0	0	0	0	0	0	0
3.0-3.5	0	0	0	0	0	0	0	0	0	0	0
3.5-4.0	0	0	0	0	0	0	0	0	0	0	0
4.0-4.5	0	0	0	0	0	0	0	0	0	0	0
4.5-5.0	0	0	0	0	0	0	0	0	0	0	0
5.0-5.5	0	0	0	0	0	0	0	0	0	0	0
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LONG. START = 36.03N/121.63W LAT. LONG. END = 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.5	0	0	0	0	0	0	0	0	0	0	0
0.5-1.0	0	0	0	0	0	0	0	0	0	0	0
1.0-1.5	0	0	0	0	0	0	0	0	0	0	0
1.5-2.0	0	0	0	0	0	0	0	0	0	0	0
2.0-2.5	0	0	0	0	0	0	0	0	0	0	0
2.5-3.0	0	0	0	0	0	0	0	0	0	0	0
3.0-3.5	0	0	0	0	0	0	0	0	0	0	0
3.5-4.0	0	0	0	0	0	0	0	0	0	0	0
4.0-4.5	0	0	0	0	0	0	0	0	0	0	0
4.5-5.0	0	0	0	0	0	0	0	0	0	0	0
5.0-5.5	0	0	0	0	0	0	0	0	0	0	0
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2784	1405	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 1.19 LARGEST HS(M) = 2.63 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 2451

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LONG. START = 36.03N/121.63W LAT. LONG. END = 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.5	0	0	0	0	0	0	0	0	0	0	0
0.5-1.0	0	0	0	0	0	0	0	0	0	0	0
1.0-1.5	0	0	0	0	0	0	0	0	0	0	0
1.5-2.0	0	0	0	0	0	0	0	0	0	0	0
2.0-2.5	0	0	0	0	0	0	0	0	0	0	0
2.5-3.0	0	0	0	0	0	0	0	0	0	0	0
3.0-3.5	0	0	0	0	0	0	0	0	0	0	0
3.5-4.0	0	0	0	0	0	0	0	0	0	0	0
4.0-4.5	0	0	0	0	0	0	0	0	0	0	0
4.5-5.0	0	0	0	0	0	0	0	0	0	0	0
5.0-5.5	0	0	0	0	0	0	0	0	0	0	0
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1041	12726	17816	11256	16954	19570	12021	1971	51	0	0

MEAN HS(M) = 1.78 LARGEST HS(M) = 6.47 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 54610

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LONG. START = 36.03N/121.63W LAT. LONG. END = 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.5	0	0	0	0	0	0	0	0	0	0	0
0.5-1.0	0	0	0	0	0	0	0	0	0	0	0
1.0-1.5	0	0	0	0	0	0	0	0	0	0	0
1.5-2.0	0	0	0	0	0	0	0	0	0	0	0
2.0-2.5	0	0	0	0	0	0	0	0	0	0	0
2.5-3.0	0	0	0	0	0	0	0	0	0	0	0
3.0-3.5	0	0	0	0	0	0	0	0	0	0	0
3.5-4.0	0	0	0	0	0	0	0	0	0	0	0
4.0-4.5	0	0	0	0	0	0	0	0	0	0	0
4.5-5.0	0	0	0	0	0	0	0	0	0	0	0
5.0-5.5	0	0	0	0	0	0	0	0	0	0	0
5.5-6.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	55	454	241	143	129	223	247	67	53	0	0

MEAN HS(M) = 2.55 LARGEST HS(M) = 5.63 MEAN TP(SEC) = 10.6 NUMBER OF CASES = 961

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	1	0	0	0	0	0	0	0	0	0	
0.50 - 0.99	1	0	0	0	0	0	0	0	0	1	
1.00 - 1.49	1	0	0	0	0	0	0	0	0	1	
1.50 - 1.99	1	0	0	0	0	0	0	0	0	1	
2.00 - 2.49	1	0	0	0	0	0	0	0	0	1	
2.50 - 2.99	1	0	0	0	0	0	0	0	0	1	
3.00 - 3.49	1	0	0	0	0	0	0	0	0	1	
3.50 - 3.99	1	0	0	0	0	0	0	0	0	1	
4.00 - 4.49	1	0	0	0	0	0	0	0	0	1	
4.50 - 4.99	1	0	0	0	0	0	0	0	0	1	
5.00 +	1	0	0	0	0	0	0	0	0	1	
TOTAL	94	311	230	41	5	4	0	0	0	407	

MEAN HS(M) = 2.65 LARGEST HS(M) = 5.32 MEAN TP(SEC) = 7.7 NUMBER OF CASES = 407

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0	0	0	0	0	0	0	0	0	0	
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	9	8	0	0	0	0	0	0	0	11	

MEAN HS(M) = 1.67 LARGEST HS(M) = 2.05 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 11

PHASE 3 ST. 119 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 36.03N/121.63W LAT. LON. END= 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

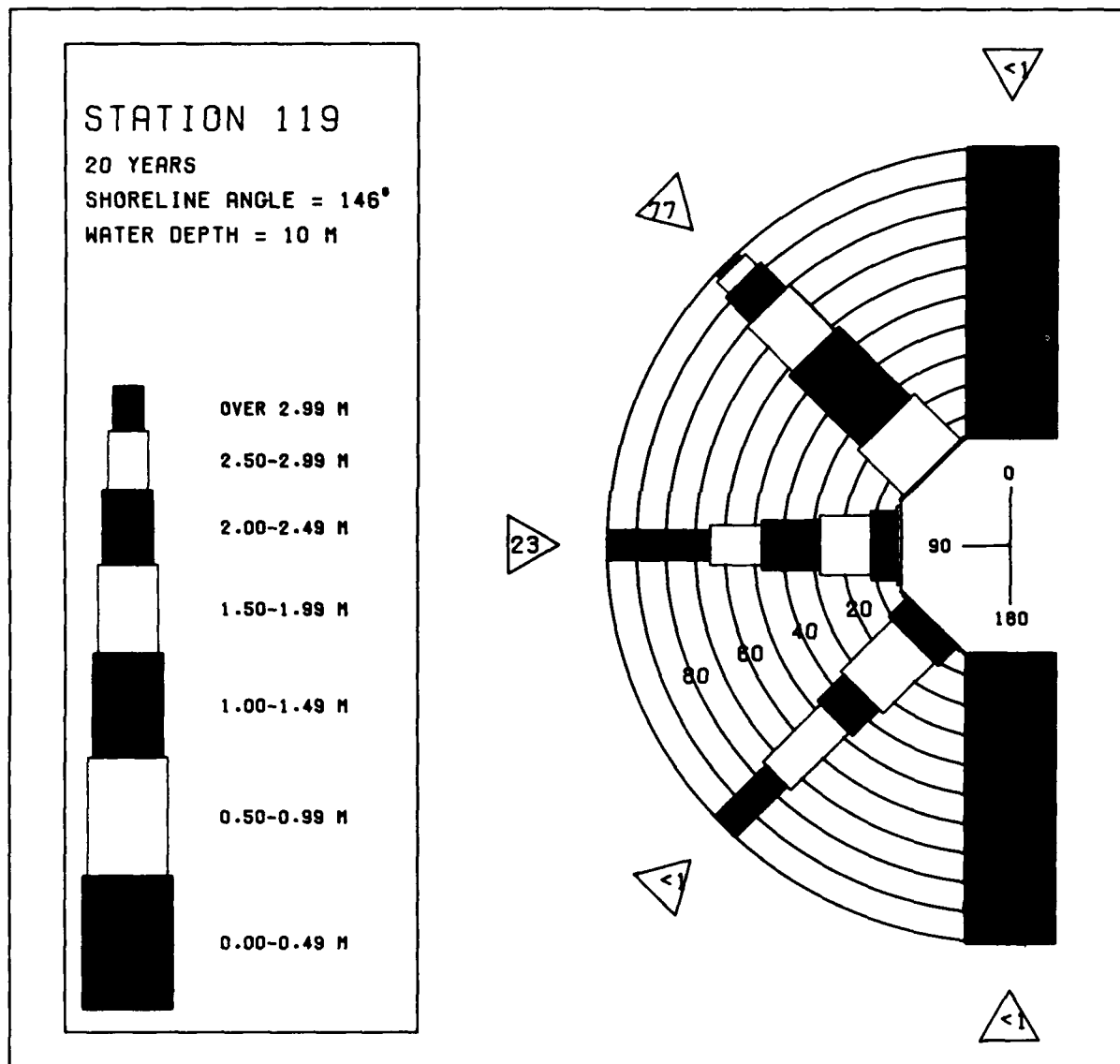
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00 - 0.49	0	0	0	0	0	0	0	0	0	0	
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 119 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 36.03N/121.63W LAT. LONG. END = 35.86N/121.53W
 SHORELINE ANGLE = 146.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	PERIOD(SECONDS)	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0-	0.49	15	32	2	11.7	13.3	15.3	18.1	22.2	LONGER		57
0.5-	90	478	747	254	116	338	49	2				1731
1.0-	200	479	681	575	608	254	142	14				2851
1.5-	97	309	200	229	600	351	220	19				1301
2.0-	7	139	99	55	285	365	242	31				356
2.5-		49	41	16	77	398	271	23				310
3.0-		17	17	6	15	161	271	23				161
3.5-		1	8	2	2	40	183	25				114
4.0-				1		7	82	21				49
4.5-							19	30				36
5.00+							7	29				
TOTAL	397	1487	1827	1140	1706	1976	1222	198	6	0		58440

MEAN HS(M) = 1.77 LARGEST HS(M) = 6.47 MEAN TP(SEC) = 10.5 TOTAL CASES = 58440



PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0.0 - 14.9
 LAT. LON. START = 35.86N/121.53W LAT. LON. END = 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	35	0	0	0	0	0	0	0	0	0	35
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	35	0	0	0	0	0	0	0	0	0	35

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.31 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 21

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 35.86N/121.53W LAT. LON. END = 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	140	138	32	0	0	0	0	0	0	0	310
0.5-0.99	2619	3600	395	0	0	0	0	0	0	0	6614
1.0-1.49	3966	7149	1628	0	0	0	0	0	0	0	11277
1.5-1.99	265	157	68	0	0	0	0	0	0	0	389
2.0-2.49	0	1	1	0	0	0	0	0	0	0	2
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6990	14595	658	0	0	0	0	0	0	0	13003

MEAN HS(M) = 1.18 LARGEST HS(M) = 2.53 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 13003

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 35.86N/121.53W LAT. LON. END = 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	60	90	48	10	10	10	10	10	10	10	574
0.5-0.99	10	827	7279	3381	2043	684	100	20	0	0	14363
1.0-1.49	65	827	3258	2701	2043	1314	732	20	0	0	10868
1.5-1.99	95	1404	1858	1651	1404	1803	1003	100	0	0	11758
2.0-2.49	8	698	1021	226	1404	1803	1003	100	0	0	11758
2.5-2.99	0	6	191	17	87	2137	1988	100	0	0	6087
3.0-3.49	0	0	23	1	0	334	1802	100	0	0	1333
3.5-3.99	0	0	0	0	0	35	179	100	0	0	541
4.0-4.49	0	0	0	0	0	0	73	100	0	0	173
4.5-4.99	0	0	0	0	0	0	0	100	0	0	114
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	181	3990	14168	10236	15689	17779	11171	1836	120	0	43951

MEAN HS(M) = 1.70 LARGEST HS(M) = 6.52 MEAN TP(SEC) = 11.3 NUMBER OF CASES = 43951

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 35.86N/121.53W LAT. LON. END = 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	8	5	1	0	0	0	0	0	0	0	13
0.5-0.99	27	63	10	10	1	0	0	0	0	0	111
1.0-1.49	49	123	32	44	23	1	0	0	0	0	276
1.5-1.99	13	275	61	44	22	32	0	1	5	0	448
2.0-2.49	0	189	112	46	27	35	0	0	0	0	417
2.5-2.99	0	66	148	25	32	56	0	0	0	0	355
3.0-3.49	0	3	65	22	5	29	0	0	0	0	137
3.5-3.99	0	0	8	10	1	17	0	0	0	0	40
4.0-4.49	0	0	1	0	5	13	0	0	0	0	29
4.5-4.99	0	0	0	0	1	10	0	0	0	0	11
5.00+	0	0	0	0	0	15	0	0	0	0	15
TOTAL	97	724	438	201	116	210	76	4	6	0	1109

MEAN HS(M) = 2.67 LARGEST HS(M) = 5.90 MEAN TP(SEC) = 8.9 NUMBER OF CASES = 1109

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL	
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	13	11	15	5	0	0	0	0	0	0	13
0.5-0.99	58	30	27	1	0	0	0	0	0	0	69
1.0-1.49	59	78	35	1	0	0	0	0	0	0	109
1.5-1.99	15	27	44	15	0	0	0	0	0	0	120
2.0-2.49	0	0	22	6	0	0	0	0	0	0	98
2.5-2.99	0	0	0	1	0	0	0	0	0	0	72
3.0-3.49	0	0	0	0	0	0	0	0	0	0	37
3.5-3.99	0	0	0	0	0	0	0	0	0	0	11
4.0-4.49	0	0	0	0	0	0	0	0	0	0	1
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0-5.49	0	0	0	0	0	0	0	0	0	0	0
5.5-5.99	0	0	0	0	0	0	0	0	0	0	0
TOTAL	145	209	149	27	1	0	0	0	0	0	317

MEAN HS(M) = 2.38 LARGEST HS(M) = 5.43 MEAN TP(SEC) = 7.2 NUMBER OF CASES = 317

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL	
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	15	8	0	0	0	0	0	0	0	0	23
0.5-0.99	0	3	0	0	0	0	0	0	0	0	3
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0-5.49	0	0	0	0	0	0	0	0	0	0	0
5.5-5.99	0	0	0	0	0	0	0	0	0	0	0
TOTAL	29	19	0	0	0	0	0	0	0	0	30

MEAN HS(M) = 0.86 LARGEST HS(M) = 1.99 MEAN TP(SEC) = 5.9 NUMBER OF CASES = 30

PHASE 3 ST. 120 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

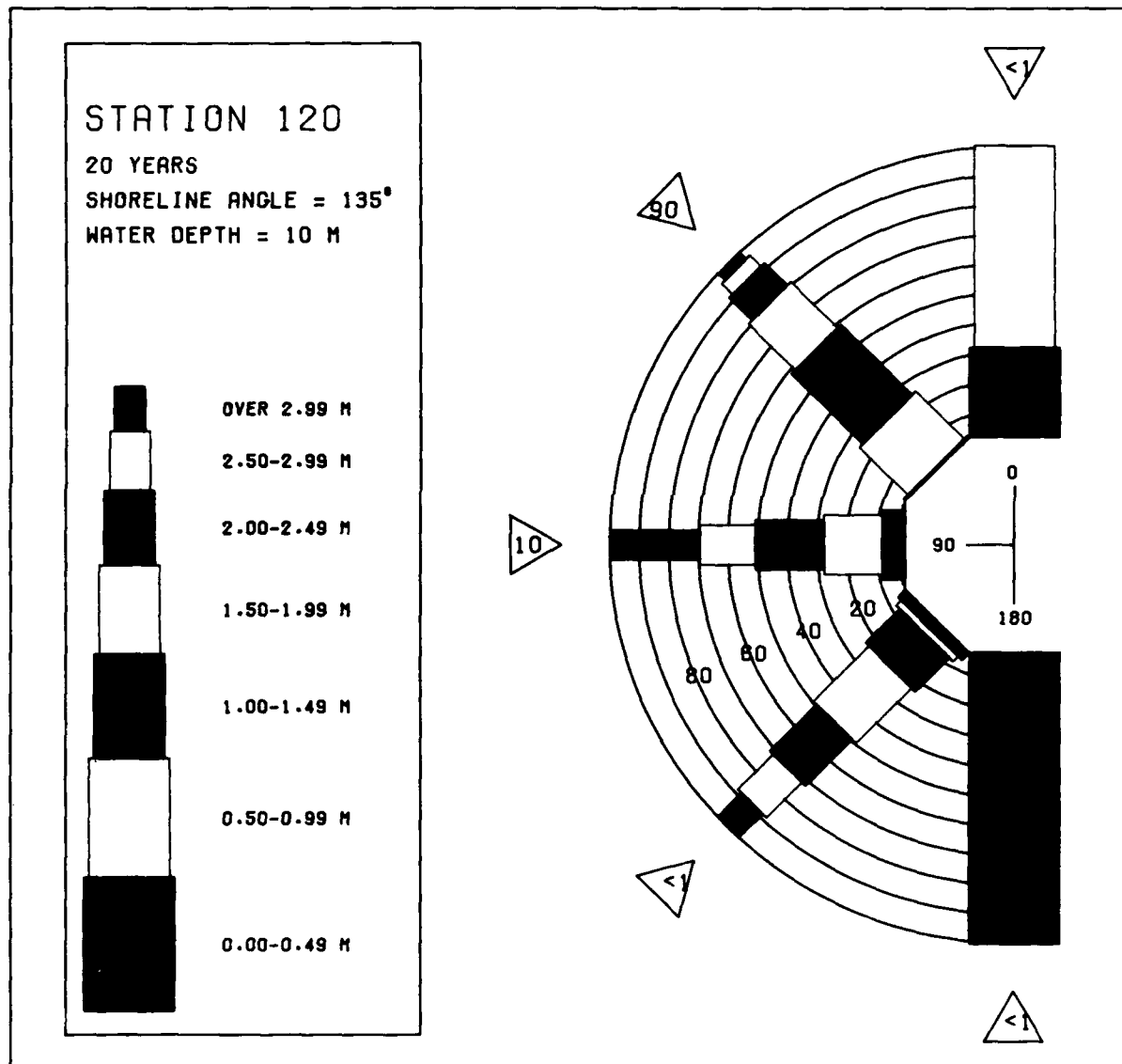
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL	
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49	0	0	0	0	0	0	0	0	0	0	0
0.5-0.99	0	0	0	0	0	0	0	0	0	0	0
1.0-1.49	0	0	0	0	0	0	0	0	0	0	0
1.5-1.99	0	0	0	0	0	0	0	0	0	0	0
2.0-2.49	0	0	0	0	0	0	0	0	0	0	0
2.5-2.99	0	0	0	0	0	0	0	0	0	0	0
3.0-3.49	0	0	0	0	0	0	0	0	0	0	0
3.5-3.99	0	0	0	0	0	0	0	0	0	0	0
4.0-4.49	0	0	0	0	0	0	0	0	0	0	0
4.5-4.99	0	0	0	0	0	0	0	0	0	0	0
5.0-5.49	0	0	0	0	0	0	0	0	0	0	0
5.5-5.99	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 120 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 35.86N/121.53W LAT. LON. END= 35.76N/121.41W
 SHORELINE ANGLE = 135.0 (DEG. AZ) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	26	44	38	33	20	33	10	2	1	1	92
0.50-0.99	41	50	47	47	26	33	17	2	3	1	209
1.00-1.49	26	44	38	33	20	33	10	2	1	1	131
1.50-1.99	41	50	47	47	26	33	17	2	3	1	201
2.00-2.49	26	44	38	33	20	33	10	2	1	1	120
2.50-2.99	41	50	47	47	26	33	17	2	3	1	205
3.00-3.49	26	44	38	33	20	33	10	2	1	1	146
3.50-3.99	41	50	47	47	26	33	17	2	3	1	157
4.00-4.49	26	44	38	33	20	33	10	2	1	1	14
TOTAL	746	1951	1539	1044	1576	1795	1121	179	8	0	58440

MEAN HS(M) = 1.61 LARGEST HS(M) = 6.52 MEAN TP(SEC) = 10.1 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 120 (35.86N/ 121.53W TO 35.76N/ 121.41W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1957	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1958	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1959	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1960	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1961	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1962	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1963	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1964	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1965	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1966	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1967	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1968	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1969	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1970	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1971	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1972	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1973	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1974	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1975	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
MEAN	2.3	2.3	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 120 (35.86N/ 121.53W TO 35.76N/ 121.41W)
MONTH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1957	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1958	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1959	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1960	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1961	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1962	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1963	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1964	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1965	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1966	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1967	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1968	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1969	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1970	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1971	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1972	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1973	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1974	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
1975	1.6	2.1	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	1.4
MEAN	2.3	2.3	1.9	1.6	1.4	1.3	1.1	1.0	1.0	1.3	1.8	2.3	

20 YR. STATISTICS FOR PACIFIC STATION120 (35.86N/ 121.53W TO 35.76N/ 121.41W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.6
MEAN PEAK WAVE PERIOD	(SECONDS)	10.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.8
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.6
LARGEST WAVE HS	(METERS)	16.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.3
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		57022415

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 14.9
LAT. LONG. START = 35.76N 121.41W LAT. LONG. END = 35.63N 121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
LAT. LONG. START = 35.76N/121.61W LAT. LONG. END = 35.63N/121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
5.5-5.9	0	10	11	.	.	.	.	.	.	.	.	11
5.0-5.4	0	43	11	.	.	.	.	.	.	.	.	54
4.5-4.9	0	178	612	.	.	.	.	.	.	.	.	2395
4.0-4.4	0	25	94	.	.	.	.	.	.	.	.	119
3.5-3.9	0	.	.	.	.	.	.	.	.	.	.	0
3.0-3.4	0	.	.	.	.	.	.	.	.	.	.	0
2.5-2.9	0	.	.	.	.	.	.	.	.	.	.	0
2.0-2.4	0	.	.	.	.	.	.	.	.	.	.	0
1.5-1.9	0	.	.	.	.	.	.	.	.	.	.	0
1.0-1.4	0	.	.	.	.	.	.	.	.	.	.	0
0.5-0.9	0	.	.	.	.	.	.	.	.	.	.	0
0.0-0.4	0	.	.	.	.	.	.	.	.	.	.	0
TOTAL	+	2249	818	0	0	0	0	0	0	0	0	1794

MEAN HS(M) = 1.17 LARGEST HS(M) = 1.69 MEAN TP(SEC) = 5.7 NUMBER OF CASES = 1794

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
LAT. LONG. START = 35.76N/121.41W LAT. LONG. END = 35.63N/121.35W
SHORELINE ANGLE = 156.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
LAT. LONG. START= 35.76N/121.41W LAT. LONG. END= 35.63N/121.35W
SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 35.76N/121.41W LAT. LON. END = 35.63N/121.35W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	PERIOD (SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49										0	
0.5-0.99										0	
1.0-1.49										0	
1.5-1.99										0	
2.0-2.49										0	
2.5-2.99										0	
3.0-3.49										0	
3.5-3.99										0	
4.0-4.49										0	
4.5-4.99										0	
5.0+										0	
TOTAL	59	237	237	40	6	7	0	0	0	352	

MEAN HS(M) = 2.62 LARGEST HS(M) = 5.04 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 352

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 35.76N/121.41W LAT. LON. END = 35.63N/121.35W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	PERIOD (SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49										0	
0.5-0.99										0	
1.0-1.49										0	
1.5-1.99										0	
2.0-2.49										0	
2.5-2.99										0	
3.0-3.49										0	
3.5-3.99										0	
4.0-4.49										0	
4.5-4.99										0	
5.0+										0	
TOTAL	6	7	0	0	0	0	0	0	0	9	

MEAN HS(M) = 0.84 LARGEST HS(M) = 1.52 MEAN TP(SEC) = 6.1 NUMBER OF CASES = 9

PHASE 3 ST. 121 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 35.76N/121.41W LAT. LON. END = 35.63N/121.35W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

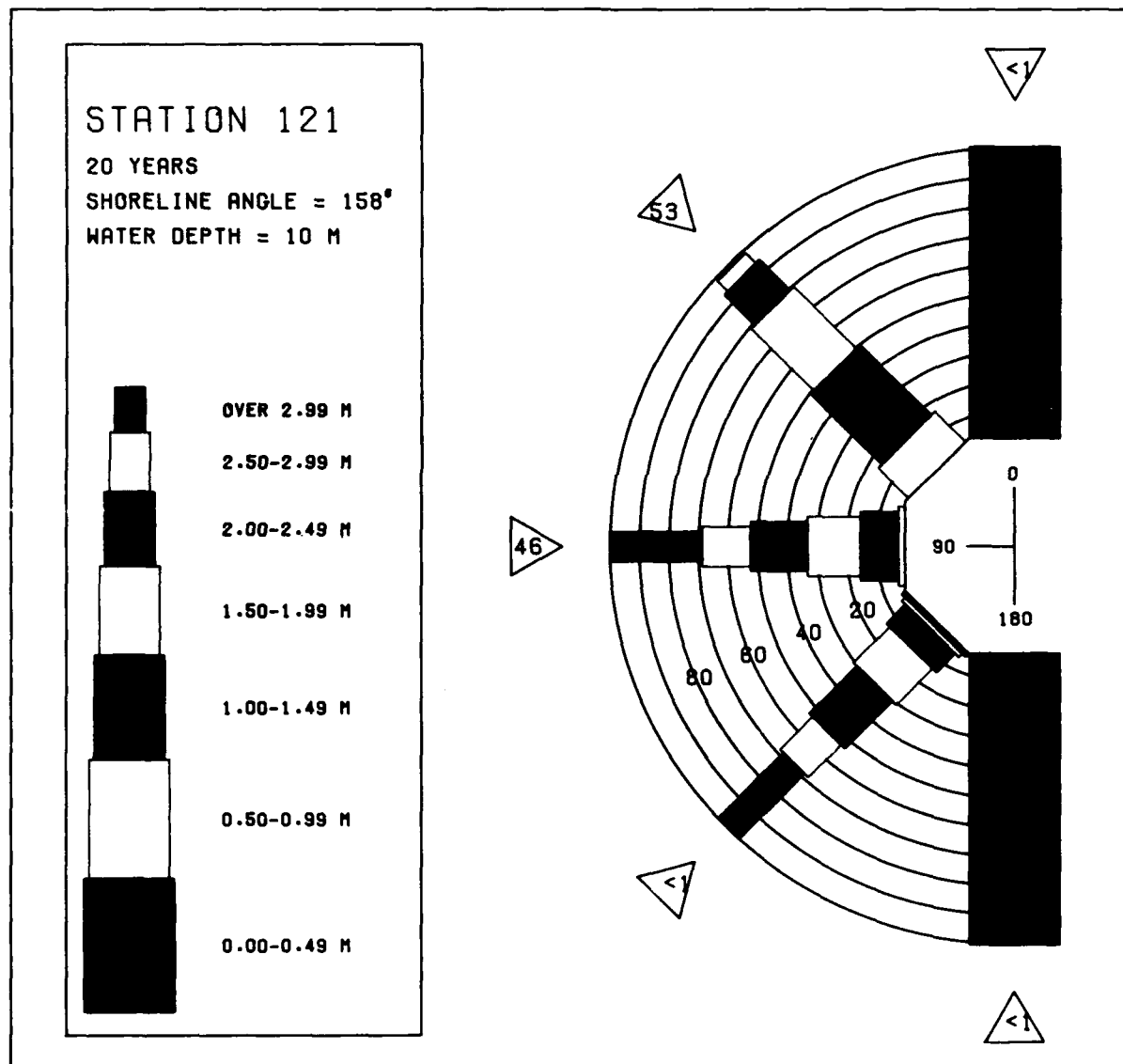
HEIGHT (METERS)	PERIOD (SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0-0.49										0	
0.5-0.99										0	
1.0-1.49										0	
1.5-1.99										0	
2.0-2.49										0	
2.5-2.99										0	
3.0-3.49										0	
3.5-3.99										0	
4.0-4.49										0	
4.5-4.99										0	
5.0+										0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 121 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 35.76N/121.41W LAT. LON. END= 35.63N/121.35W
 SHORELINE ANGLE = 158.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00-0.49	2	2	6	1	50	17	2	3	3	3	11
0.50-0.99	65	20	42	113	535	137	26	8	3	3	878
1.00-1.49	340	495	630	426	358	330	180	11	3	3	2415
1.50-1.99	166	277	137	366	474	456	155	11	3	3	2434
2.00-2.49	3	5	1	170	201	453	168	11	3	3	1681
2.50-2.99	3	6	2	43	65	319	224	18	2	2	1034
3.00-3.49	3	3	1	14	15	130	215	18	1	1	677
3.50-3.99	3	3	1	4	5	44	157	21	1	1	391
4.00-4.49	3	3	1	1	1	5	91	18	1	1	225
4.50-4.99	3	3	1	1	1	5	34	18	1	1	114
5.00-5.49	3	3	1	1	1	5	34	18	1	1	102
TOTAL	576	1699	1609	1138	1699	1893	1152	185	11	0	58440
MEAN HS(M) = 2.04	LARGEST HS(M) = 6.64		MEAN TP(SEC)= 10.3		TOTAL CASES =		58440				

MEAN HS(M) = 2.04 LARGEST HS(M) = 6.64 MEAN TP(SEC) = 10.3 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
HIS STATION 121 (35.76N/ 121.41W TO 35.63N/ 121.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	2.8	2.9	2.4	2.1	1.7	1.6	1.4	1.3	1.3	1.7	2.3	2.9	2.1

LARGEST HS(METERS) BY MONTH AND YEAR
HIS STATION 121 (35.76N/ 121.41W TO 35.63N/ 121.35W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1975	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5

20 YR. STATISTICS FOR PACIFIC STATION 121 (35.76N/ 121.41W TO 35.63N/ 121.35W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.0
MEAN PEAK WAVE PERIOD	(SECONDS)	10.0
HIGHEST FREQUENCY 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	3.7
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	14.6
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

[illegible]

HEIGHT(METERS)		PERIOD(SECONDS)						TOTAL				
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.4	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0	0	7970	6042	3304	17316
0.5	0.5	5162	13706	4087	22955
1	1	227	3593	1158	4978
1.5	1.5	11	54	46	111
2	2	5
2.5	2.5	0
3	3	0
3.5	3.5	0
4	4	0
4.5	4.5	0
5	5	0
TOTAL		13370	23400	8595	0	0	0	0	0	0	0	
MEAN HS(M) = 0.62		LARGEST HS(M) = 2.19		MEAN TP(SEC) = 6.8		NUMBER OF CASES = 26515						

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
100	0	342	63	194	132	513	378	35	15	.	.	4453
500	0	266	357	298	467	593	388	824	90	.	.	18943
1000	0	241	362	287	525	1030	2540	2049	174	11	.	7758
1500	0	68	177	150	61	133	550	626	167	3	.	22933
2000	0	3	35	29	13	3	157	186	53	.	.	635
2500	0	.	1	11	17	1	37	66	10	.	.	215
3000	0	.	.	3	3	.	.	11	.	.	.	25
3500	0	5	.	.	.	9
4000	0	13
4500	0	0
5000	0	0
5500	0	0
6000	0	0
6500	0	0
7000	0	0
7500	0	0
8000	0	0
8500	0	0
9000	0	0
9500	0	0
10000	0	0
TOTAL		920	1530	5960	6623	7706	7270	3812	509	14	0	
MEAN HS(M) = 0.90		LARGEST HS(M) = 4.44		MEAN TP(SEC) = 10.9		NUMBER OF CASES = 20090						

HEIGHT(METERS)		PERIOD(SECONDS)								TOTAL		
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	100	4	6	8	9	10	11	13	15	18	22	380
0.1	100	3	4	5	6	7	8	9	10	11	12	502
0.2	100	3	4	5	6	7	8	9	10	11	12	98
0.3	100	3	4	5	6	7	8	9	10	11	12	70
0.4	100	3	4	5	6	7	8	9	10	11	12	36
0.5	100	3	4	5	6	7	8	9	10	11	12	81
0.6	100	3	4	5	6	7	8	9	10	11	12	23
0.7	100	3	4	5	6	7	8	9	10	11	12	1
0.8	100	3	4	5	6	7	8	9	10	11	12	3
0.9	100	3	4	5	6	7	8	9	10	11	12	5
1.0	100	3	4	5	6	7	8	9	10	11	12	0
TOTAL		1223	1282	436	66	11	8	0	3	0	0	1780
MEAN HS(M) = 1.51		LARGEST HS(M) = 5.47		MEAN TP(SEC) = 6.6		NUMBER OF CASES = 1780						

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2722	185	94	3	.	.	.	.	.	.	2857
0.50 - 0.99	580	85	34	.	.	.	.	.	.	.	759
1.00 - 1.49	174	11	.	.	.	.	.	.	.	.	222
1.50 - 1.99	32	5	.	.	.	.	.	.	.	.	90
2.00 - 2.49	10	3	.	.	.	.	.	.	.	.	43
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	3518	317	134	3	0	0	0	0	0	0	

MEAN HS(M) = 0.44 LARGEST HS(M) = 2.83 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 2325

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	2650	.	.	.	.	.	.	.	.	.	2650
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	2650	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.06 LARGEST HS(M) = 0.18 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 1549

PHASE 3 ST. 122 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 35.63N/121.35W LAT. LON. END= 35.56N/121.26W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

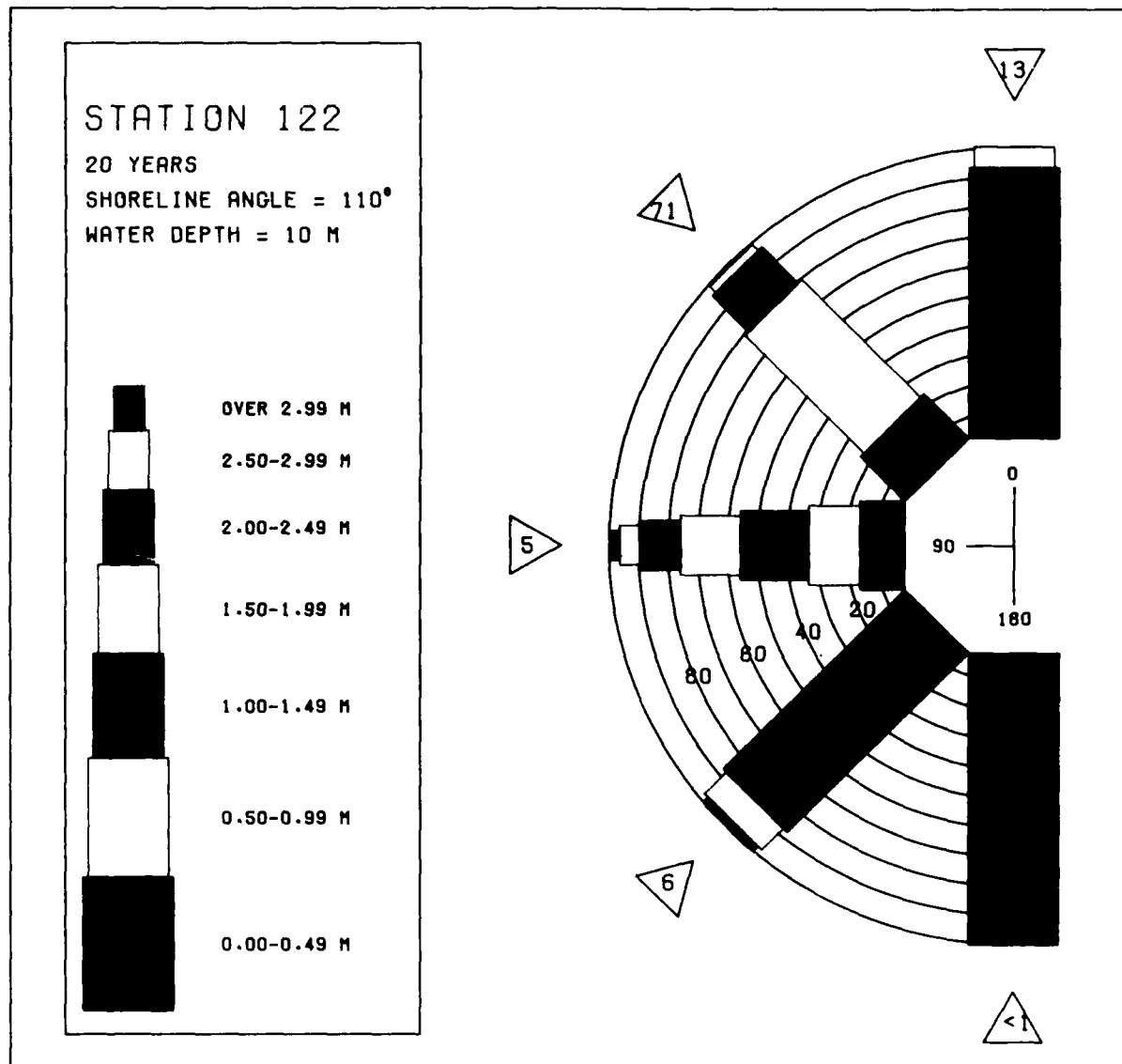
HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 122 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 35.63N/121.35W LAT. LONG. END= 35.56N/121.26W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.0 - 0.49	1946	628	524	132	53	18	3	1	...	...	3305
0.50 - 0.99	643	1421	717	467	595	378	82	6	...	...	4312
1.00 - 1.49	99	431	198	51	106	254	204	17	1	...	1363
1.50 - 1.99	21	104	27	8	13	55	62	16	...	...	306
2.00 - 2.49	2	56	17	2	1	15	18	5	...	...	116
2.50 - 2.99	...	10	20	3	...	3	6	1	...	...	43
3.00 - 3.49	...	...	6	1	...	...	1	...	...	...	8
3.50 - 3.99	...	...	...	...	...	...	...	...	...	...	2
4.00 - 4.49	...	...	...	...	...	...	1	...	...	...	1
4.50 - 4.99	...	...	...	...	...	...	...	...	...	...	0
5.00 +	...	...	...	...	...	...	...	...	...	...	0
TOTAL	2711	2650	1510	667	768	723	377	49	1	0	

MEAN HS(M) = 0.66 LARGEST HS(M) = 5.47 MEAN TP(SEC) = 8.0 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 122 (35.63N/ 121.35W TO 35.56N/ 121.26W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1957	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1958	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1959	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1960	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1961	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1962	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1963	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1964	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1965	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1966	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1967	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1968	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1969	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1970	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1971	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1972	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1973	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1974	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1975	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
MEAN	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 122 (35.63N/ 121.35W TO 35.56N/ 121.26W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1957	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1958	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1959	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1960	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1961	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1962	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1963	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1964	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1965	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1966	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1967	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1968	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1969	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1970	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1971	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1972	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1973	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1974	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
1975	0.1	0.1	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6

20 YR. STATISTICS FOR PACIFIC STATION122 (35.63N/ 121.35W TO 35.56N/ 121.26W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	9.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.0
LARGEST WAVE HS	(METERS)	0.0
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	0.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	91.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021606

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
 SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.5 - 0.99	0
1.0 - 1.49	0
1.5 - 1.99	0
2.0 - 2.49	0
2.5 - 2.99	0
3.0 - 3.49	0
3.5 - 3.99	0
4.0 - 4.49	0
4.5 - 4.99	0
5.0 - 5.49	0
5.5 - 5.99	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
 SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	196	318	.	.	.	.	.	.	.	.	207
0.5 - 0.99	1016	408	.	.	.	.	.	.	.	.	1334
1.0 - 1.49	1416	56	.	.	.	.	.	.	.	.	1824
1.5 - 1.99	70	.	.	.	.	.	.	.	.	.	126
2.0 - 2.49	.	.	.	.	.	.	.	.	.	.	0
2.5 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.0 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.5 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.0 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.5 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.0 - 5.49	.	.	.	.	.	.	.	.	.	.	0
5.5 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2698	793	0	0	0	0	0	0	0	0	2043

MEAN HS(M) = 1.02 LARGEST HS(M) = 1.99 MEAN TP(SEC) = 5.6 NUMBER OF CASES = 2043

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
 SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	49	123	371	254	133	10	13	11	.	.	663
0.5 - 0.99	439	4466	7549	2534	1373	407	33	11	.	.	16897
1.0 - 1.49	1211	4977	6033	2555	1541	2426	472	59	.	.	21768
1.5 - 1.99	583	4358	1978	2558	1768	4616	1338	136	.	.	21400
2.0 - 2.49	13	1226	1060	184	845	5188	1733	188	.	.	11023
2.5 - 2.99	.	150	353	23	111	1512	3236	191	.	.	6408
3.0 - 3.49	.	6	3	1	6	405	1627	24	.	.	2267
3.5 - 3.99	.	.	.	.	.	34	859	3	.	.	1131
4.0 - 4.49	.	.	.	.	.	5	167	3	.	.	426
4.5 - 4.99	.	.	.	.	.	.	53	330	.	.	383
5.0 - 5.49	.	.	.	.	.	.	.	.	.	.	0
5.5 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	2295	15306	17347	11258	16490	18288	11061	1839	74	0	54933

MEAN HS(M) = 1.75 LARGEST HS(M) = 6.58 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 54933

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 35.56N/121.26W LAT. LON. END= 35.46N/121.20W
 SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	8	11	1	3	.	1	.	.	.	.	10
0.5 - 0.99	15	11	6	3	.	1	.	.	.	.	36
1.0 - 1.49	8	107	27	32	25	18	6	1	.	.	154
1.5 - 1.99	37	107	29	27	51	51	34	16	8	.	350
2.0 - 2.49	13	140	32	18	20	85	39	18	23	.	384
2.5 - 2.99	.	104	25	29	20	22	39	46	11	.	409
3.0 - 3.49	.	42	49	13	8	23	53	15	6	.	199
3.5 - 3.99	.	5	29	3	6	3	24	1	1	.	100
4.0 - 4.49	.	.	11	3	.	1	20	3	6	.	44
4.5 - 4.99	.	.	1	.	.	.	6	5	.	.	12
5.0 - 5.49	.	.	.	.	.	.	.	.	.	.	5
5.5 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	81	457	210	126	130	254	295	90	60	0	1018

MEAN HS(M) = 2.42 LARGEST HS(M) = 5.10 MEAN TP(SEC) = 10.3 NUMBER OF CASES = 1018

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LON. START = 35.56N/121.26W LAT. LON. END = 35.46N/121.20W
 SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	5	5	1	1	1	1	1	1	1	1	11
0.5-0.99	11	11	15	15	15	15	15	15	15	15	111
1.0-1.49	11	11	15	15	15	15	15	15	15	15	111
1.5-1.99	11	11	15	15	15	15	15	15	15	15	111
2.0-2.49	11	11	15	15	15	15	15	15	15	15	111
2.5-2.99	11	11	15	15	15	15	15	15	15	15	111
3.0-3.49	11	11	15	15	15	15	15	15	15	15	111
3.5-3.99	11	11	15	15	15	15	15	15	15	15	111
4.0-4.99	11	11	15	15	15	15	15	15	15	15	111
5.0-5.99	11	11	15	15	15	15	15	15	15	15	111
TOTAL	85	310	184	26	5	0	0	0	0	0	365

MEAN HS(M) = 2.48 LARGEST HS(M) = 5.29 MEAN TP(SEC) = 7.5 NUMBER OF CASES = 365

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LON. START = 35.56N/121.26W LAT. LON. END = 35.46N/121.20W
 SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	3	5	1	1	1	1	1	1	1	1	13
0.5-0.99	3	5	1	1	1	1	1	1	1	1	13
1.0-1.49	3	5	1	1	1	1	1	1	1	1	13
1.5-1.99	3	5	1	1	1	1	1	1	1	1	13
2.0-2.49	3	5	1	1	1	1	1	1	1	1	13
2.5-2.99	3	5	1	1	1	1	1	1	1	1	13
3.0-3.49	3	5	1	1	1	1	1	1	1	1	13
3.5-3.99	3	5	1	1	1	1	1	1	1	1	13
4.0-4.99	3	5	1	1	1	1	1	1	1	1	13
5.0-5.99	3	5	1	1	1	1	1	1	1	1	13
TOTAL	17	7	0	0	0	0	0	0	0	0	16

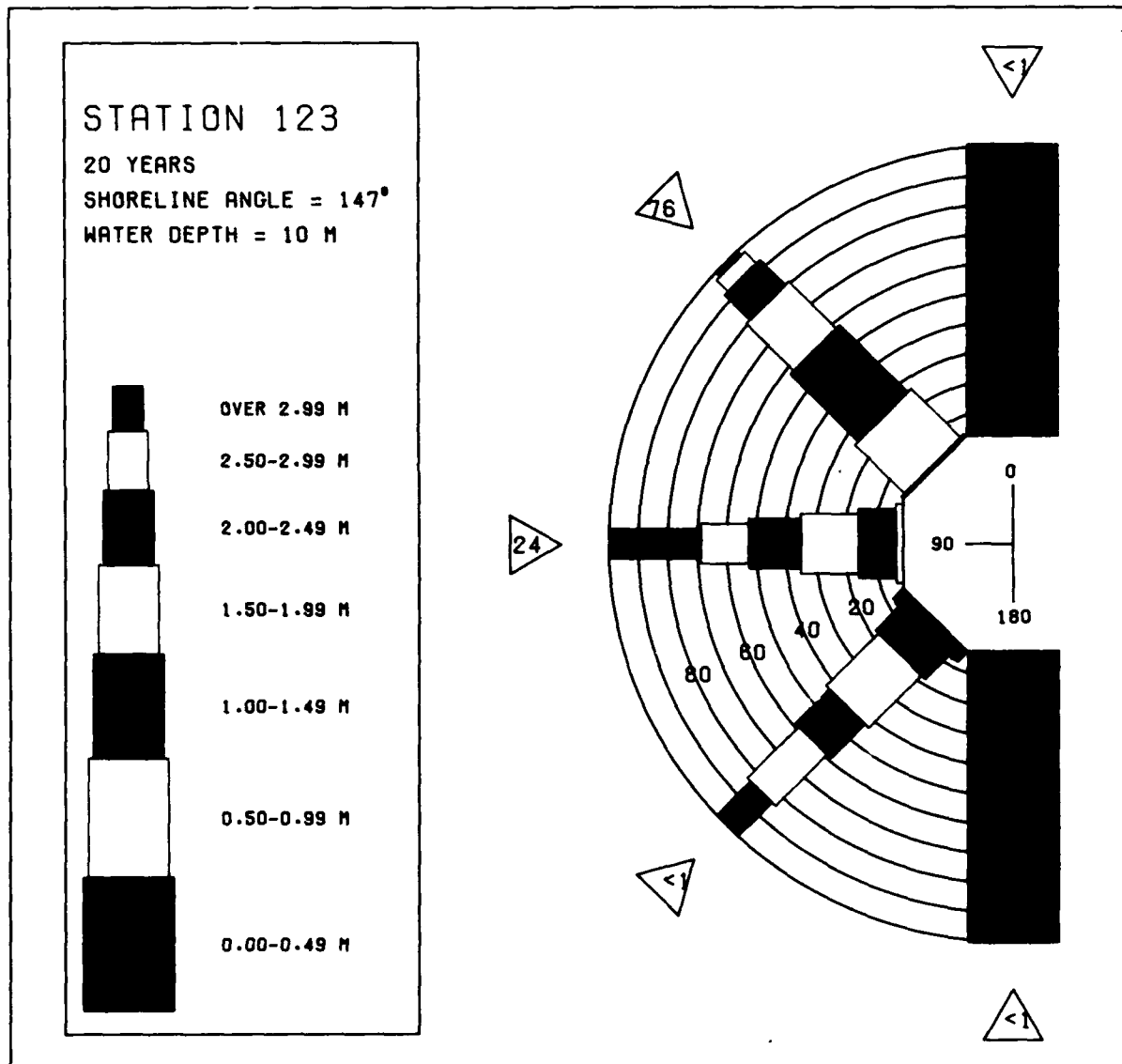
MEAN HS(M) = 0.91 LARGEST HS(M) = 2.14 MEAN TP(SEC) = 5.5 NUMBER OF CASES = 16

PHASE 3 ST. 123 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LON. START = 35.56N/121.26W LAT. LON. END = 35.46N/121.20W
 SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	51	1	1	1	1	1	1	1	1	1	51
0.5-0.99	51	1	1	1	1	1	1	1	1	1	51
1.0-1.49	51	1	1	1	1	1	1	1	1	1	51
1.5-1.99	51	1	1	1	1	1	1	1	1	1	51
2.0-2.49	51	1	1	1	1	1	1	1	1	1	51
2.5-2.99	51	1	1	1	1	1	1	1	1	1	51
3.0-3.49	51	1	1	1	1	1	1	1	1	1	51
3.5-3.99	51	1	1	1	1	1	1	1	1	1	51
4.0-4.99	51	1	1	1	1	1	1	1	1	1	51
5.0-5.99	51	1	1	1	1	1	1	1	1	1	51
TOTAL	51	0	0	0	0	0	0	0	0	0	30

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.22 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 30

PHASE 3 ST. 123 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 35.56N/121.26W LAT. LONG. END= 35.46N/121.20W
SHORELINE ANGLE = 147.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 123 (35.56N/ 121.26W TO 35.46N/ 121.20W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1965	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1966	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1967	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1968	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1969	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1970	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1971	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1972	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1973	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1974	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1975	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
MEAN	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 123 (35.56N/ 121.26W TO 35.46N/ 121.20W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1965	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1966	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1967	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1968	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1969	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1970	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1971	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1972	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1973	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1974	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
1975	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7
MEAN	2.5	2.5	2.1	1.8	1.5	1.4	1.2	1.1	1.1	1.4	2.0	2.5	1.7

20 YR. STATISTICS FOR PACIFIC STATION 123 (35.56N/ 121.26W TO 35.46N/ 121.20W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.7
MEAN PEAK WAVE PERIOD	(SECONDS)	10.3
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.9
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.6
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	71.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
 SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	34	0	0	0	0	0	0	0	0	0	34
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	34	0	0	0	0	0	0	0	0	0	34

MEAN HS(M) = 0.14 LARGEST HS(M) = 0.47 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 20

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
 SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	147	273	32	0	0	0	0	0	0	0	452
0.50 - 0.99	2369	4567	231	0	0	0	0	0	0	0	7127
1.00 - 1.49	3324	5420	111	0	0	0	0	0	0	0	8855
1.50 - 1.99	208	2633	51	0	0	0	0	0	0	0	3093
2.00 - 2.49	1	224	3	0	0	0	0	0	0	0	228
2.50 - 2.99	0	6	0	0	0	0	0	0	0	0	6
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6049	13323	428	0	0	0	0	0	0	0	11576

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.96 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 11576

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
 SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	18	47	766	106	28	25	15	13	1	0	1043
0.50 - 0.99	1644	9368	4668	289	807	138	138	13	1	0	19519
1.00 - 1.49	1303	3761	4375	759	4587	949	133	13	1	0	22630
1.50 - 1.99	20	1398	949	398	6594	2265	133	13	1	0	16809
2.00 - 2.49	0	515	742	201	873	1115	3003	325	34	0	9827
2.50 - 2.99	0	77	88	43	123	1322	2900	325	8	0	4853
3.00 - 3.49	0	6	10	3	5	270	1454	313	10	0	2077
3.50 - 3.99	0	0	0	0	0	34	364	193	11	0	734
4.00 - 4.49	0	0	0	0	0	6	78	193	0	0	275
4.50 - 4.99	0	0	0	0	0	0	10	63	0	0	73
5.00 +	0	0	0	0	0	0	0	0	0	0	37
TOTAL	178	4880	16131	10343	15450	17770	11176	1885	114	0	45562

MEAN HS(M) = 1.53 LARGEST HS(M) = 5.71 MEAN TP(SEC) = 11.2 NUMBER OF CASES = 45562

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
 SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0. - 0.49	6	0	1	0	0	0	0	0	0	0	6
0.50 - 0.99	41	55	29	27	5	1	0	3	0	0	109
1.00 - 1.49	14	239	27	10	10	15	0	0	0	0	293
1.50 - 1.99	27	354	85	27	15	13	0	0	0	0	496
2.00 - 2.49	0	198	107	15	10	10	0	0	0	0	320
2.50 - 2.99	0	41	42	18	3	1	0	0	0	0	188
3.00 - 3.49	0	3	8	6	1	0	0	0	0	0	74
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	24
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	12
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	3
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	167	841	376	114	43	44	43	3	0	0	968

MEAN HS(M) = 2.32 LARGEST HS(M) = 5.37 MEAN TP(SEC) = 7.9 NUMBER OF CASES = 968

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
 SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	8	0	30	0	0	0	0	0	0	0	38
0.50 - 1.00	32	15	11	1	0	0	0	0	0	0	47
1.00 - 1.49	51	11	11	1	0	0	0	0	0	0	74
1.50 - 2.00	51	87	11	0	0	0	0	0	0	0	103
2.00 - 2.49	1	99	32	0	0	0	0	0	0	0	118
2.50 - 3.00	0	22	8	5	0	0	0	0	0	0	54
3.00 - 3.49	0	1	0	1	0	0	0	0	0	0	14
3.50 - 4.00	0	0	0	1	0	0	0	0	0	0	2
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	1
4.50 - 5.00	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	97	235	112	8	0	0	0	0	0	0	272

MEAN HS(M) = 2.28 LARGEST HS(M) = 5.38 MEAN TP(SEC) = 7.1 NUMBER OF CASES = 272

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
 SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	15	0	0	0	0	0	0	0	0	0	15
0.50 - 1.00	6	1	0	0	0	0	0	0	0	0	7
1.00 - 1.49	3	0	0	0	0	0	0	0	0	0	3
1.50 - 2.00	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 3.00	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 4.00	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 5.00	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	24	1	0	0	0	0	0	0	0	0	25

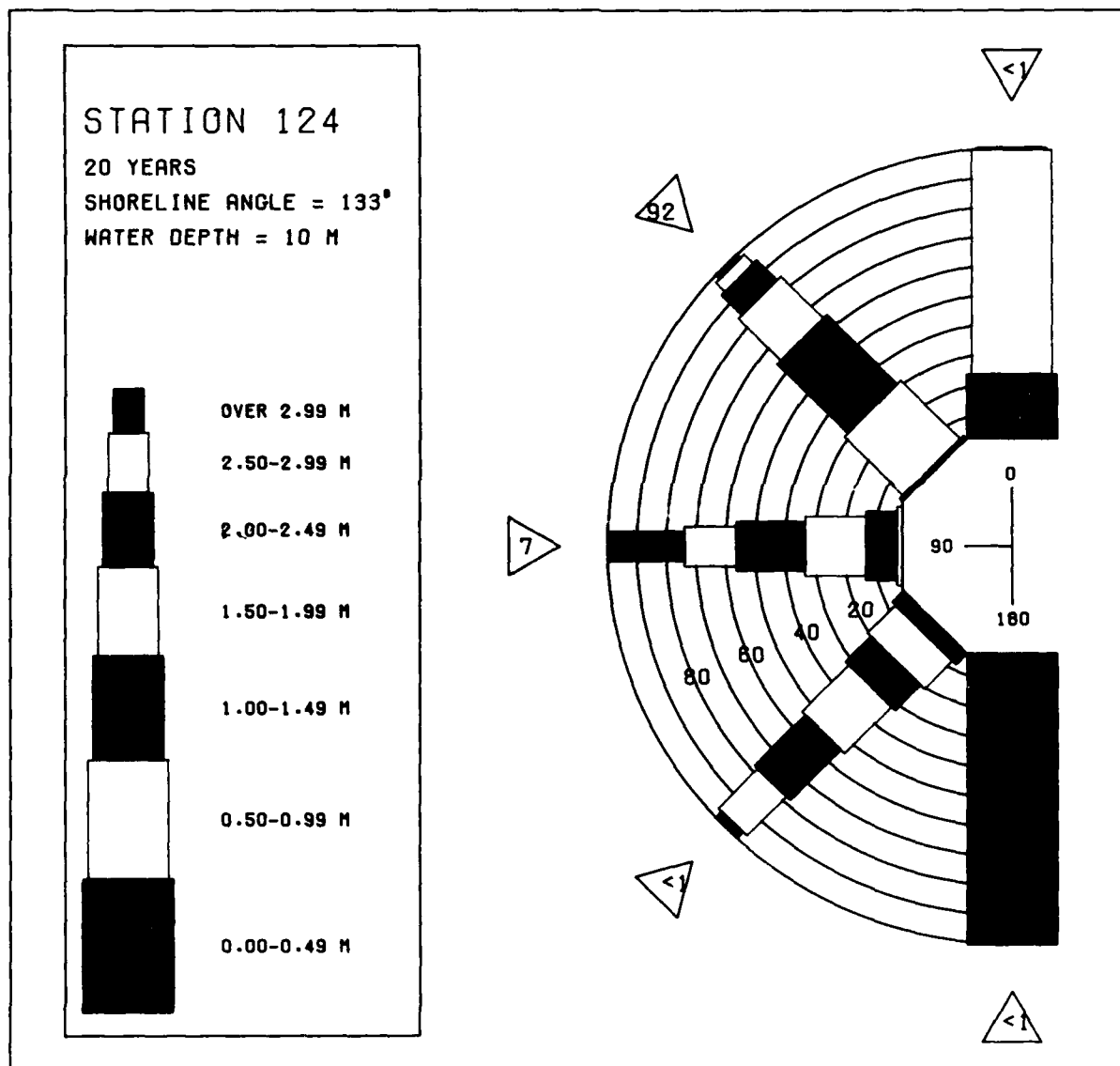
MEAN HS(M) = 0.65 LARGEST HS(M) = 1.60 MEAN TP(SEC) = 5.3 NUMBER OF CASES = 16

PHASE 3 ST. 124 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 35.46N/121.20W LAT. LON. END= 35.45N/121.01W
 SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0	0	0	0	0	0	0	0	0	0	0
0.50 - 1.00	0	0	0	0	0	0	0	0	0	0	0
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	0
1.50 - 2.00	0	0	0	0	0	0	0	0	0	0	0
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	0
2.50 - 3.00	0	0	0	0	0	0	0	0	0	0	0
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	0
3.50 - 4.00	0	0	0	0	0	0	0	0	0	0	0
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	0
4.50 - 5.00	0	0	0	0	0	0	0	0	0	0	0
5.00 +	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 124 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 35.46N/121.20W LAT. LONG. END= 35.45N/121.01W
SHORELINE ANGLE = 133.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

[illegible]

MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 124 (35.46N/ 121.20W TO 35.45N/ 121.01W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
MEAN	2.1	2.1	1.7	1.5	1.3	1.2	1.0	0.9	1.0	1.2	1.6	2.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 124 (35.46N/ 121.20W TO 35.45N/ 121.01W)

YEAR	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1957	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1958	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1959	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1960	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1961	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1962	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1963	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1964	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1965	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1966	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1967	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1968	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1969	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1970	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1971	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1972	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1973	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1974	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
1975	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	

20 YR. STATISTICS FOR PACIFIC STATION124 (35.46N/ 121.20W TO 35.45N/ 121.01W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.1
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	1.8
LARGEST WAVE HS	(METERS)	15.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121312

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	5441	.	.	.	.	.	.	.	.	.	5441
0.50-0.99	0
1.00-1.49	0
1.50-1.99	0
2.00-2.49	0
2.50-2.99	0
3.00-3.49	0
3.50-3.99	0
4.00-4.49	0
4.50-4.99	0
5.00+	0
TOTAL	5441	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.11 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 3180

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	7980	6095	3347	.	.	.	.	.	.	.	17422
0.50-0.99	5167	13721	4091	.	.	.	.	.	.	.	22979
1.00-1.49	227	3591	1158	.	.	.	.	.	.	.	4976
1.50-1.99	11	54	46	.	.	.	.	.	.	.	111
2.00-2.49	.	.	.	.	.	.	.	.	.	.	5
2.50-2.99	.	.	.	.	.	.	.	.	.	.	0
3.00-3.49	.	.	.	.	.	.	.	.	.	.	0
3.50-3.99	.	.	.	.	.	.	.	.	.	.	0
4.00-4.49	.	.	.	.	.	.	.	.	.	.	0
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	13385	23466	8642	0	0	0	0	0	0	0	0

MEAN HS(M) = 0.62 LARGEST HS(M) = 2.19 MEAN TP(SEC) = 6.8 NUMBER OF CASES = 26590

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	3857	800	1925	1343	524	113	134	181	222	.	4515
0.50-0.99	385	309	2901	4702	5380	3809	822	80	.	.	19038
1.00-1.49	249	374	784	523	1054	2546	2058	174	11	.	7775
1.50-1.99	68	186	185	604	128	155	624	167	5	.	2316
2.00-2.49	.	35	237	171	15	155	184	53	.	.	539
2.50-2.99	.	.	.	5	3	32	65	10	.	.	209
3.00-3.49	.	.	.	.	.	.	10	.	.	.	24
3.50-3.99	.	.	.	.	.	.	.	.	.	.	11
4.00-4.49	.	.	.	.	.	.	.	.	.	.	13
4.50-4.99	.	.	.	.	.	.	.	.	.	.	0
5.00+	.	.	.	.	.	.	.	.	.	.	0
TOTAL	959	1567	5977	6674	7730	7288	3815	514	16	0	0

MEAN HS(M) = 0.90 LARGEST HS(M) = 4.41 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 20202

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 35.45N/121.01W LAT. LON. END= 35.41N/120.91W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.0-0.49	576	111	.	.	.	.	.	.	.	.	687
0.50-0.99	614	88	.	.	.	.	.	3	.	.	705
1.00-1.49	386	390	6	5	.	.	.	.	.	.	787
1.50-1.99	80	455	87	13	.	.	.	.	.	.	635
2.00-2.49	10	314	140	5	.	1	.	.	.	.	470
2.50-2.99	.	46	147	17	5	.	.	.	.	.	216
3.00-3.49	.	.	44	22	.	3	.	.	.	.	70
3.50-3.99	.	.	10	1	.	.	.	.	.	.	14
4.00-4.49	.	.	.	.	.	.	.	.	.	.	1
4.50-4.99	.	.	.	.	.	.	.	.	.	.	4
5.00+	.	.	.	.	.	.	.	.	.	.	4
TOTAL	1666	1405	436	64	11	8	0	3	0	0	0

MEAN HS(M) = 1.33 LARGEST HS(M) = 5.47 MEAN TP(SEC) = 6.4 NUMBER OF CASES = 2109

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 35.45N/121.01W LAT. LONG. END = 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
LAT. LONG. START = 35.45N/121.01W LAT. LONG. END = 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.000000	0.49	.	.	.	.	.	.	.	.	.	0
0.000000	0.99	.	.	.	.	.	.	.	.	.	0
0.000000	1.49	.	.	.	.	.	.	.	.	.	0
0.000000	1.99	.	.	.	.	.	.	.	.	.	0
0.000000	2.49	.	.	.	.	.	.	.	.	.	0
0.000000	2.99	.	.	.	.	.	.	.	.	.	0
0.000000	3.49	.	.	.	.	.	.	.	.	.	0
0.000000	3.99	.	.	.	.	.	.	.	.	.	0
0.000000	4.49	.	.	.	.	.	.	.	.	.	0
0.000000	4.99	.	.	.	.	.	.	.	.	.	0
0.000000	5.49	.	.	.	.	.	.	.	.	.	0
0.000000	5.99	.	.	.	.	.	.	.	.	.	0
0.000000	6.49	.	.	.	.	.	.	.	.	.	0
0.000000	6.99	.	.	.	.	.	.	.	.	.	0
0.000000	7.49	.	.	.	.	.	.	.	.	.	0
0.000000	7.99	.	.	.	.	.	.	.	.	.	0
0.000000	8.49	.	.	.	.	.	.	.	.	.	0
0.000000	8.99	.	.	.	.	.	.	.	.	.	0
0.000000	9.49	.	.	.	.	.	.	.	.	.	0
0.000000	9.99	.	.	.	.	.	.	.	.	.	0
0.000000	10.49	.	.	.	.	.	.	.	.	.	0
0.000000	10.99	.	.	.	.	.	.	.	.	.	0
0.000000	11.49	.	.	.	.	.	.	.	.	.	0
0.000000	11.99	.	.	.	.	.	.	.	.	.	0
0.000000	12.49	.	.	.	.	.	.	.	.	.	0
0.000000	12.99	.	.	.	.	.	.	.	.	.	0
0.000000	13.49	.	.	.	.	.	.	.	.	.	0
0.000000	13.99	.	.	.	.	.	.	.	.	.	0
0.000000	14.49	.	.	.	.	.	.	.	.	.	0
0.000000	14.99	.	.	.	.	.	.	.	.	.	0
0.000000	15.49	.	.	.	.	.	.	.	.	.	0
0.000000	15.99	.	.	.	.	.	.	.	.	.	0
0.000000	16.49	.	.	.	.	.	.	.	.	.	0
0.000000	16.99	.	.	.	.	.	.	.	.	.	0
0.000000	17.49	.	.	.	.	.	.	.	.	.	0
0.000000	17.99	.	.	.	.	.	.	.	.	.	0
0.000000	18.49	.	.	.	.	.	.	.	.	.	0
0.000000	18.99	.	.	.	.	.	.	.	.	.	0
0.000000	19.49	.	.	.	.	.	.	.	.	.	0
0.000000	19.99	.	.	.	.	.	.	.	.	.	0
0.000000	20.49	.	.	.	.	.	.	.	.	.	0
0.000000	20.99	.	.	.	.	.	.	.	.	.	0
0.000000	21.49	.	.	.	.	.	.	.	.	.	0
0.000000	21.99	.	.	.	.	.	.	.	.	.	0
0.000000	22.49	.	.	.	.	.	.	.	.	.	0
0.000000	22.99	.	.	.	.	.	.	.	.	.	0
0.000000	23.49	.	.	.							

PHASE 3 ST. 125 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LONG. START = 35.45N/121.01W LAT. LONG. END = 35.41N/120.91W
SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.	LARGEST HS(M) = 0.				MEAN TP(SEC) = 0.		NUMBER OF CASES = 0				

PHASE 3 ST. 125 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 35.45N/121.01W LAT. LON. END = 35.41N/120.91W
 SHORELINE ANGLE = 110.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	-	1757	634	530	134	54	18	3	2	.	.	3132
0.5-0.99	-	624	1417	708	470	598	380	82	9	.	.	4288
1.0-1.49	-	86	435	195	53	105	254	205	17	1	.	1351
1.5-1.99	-	16	106	17	7	12	55	62	16	.	.	303
2.0-2.49	-	.	50	19	2	1	15	18	5	.	.	109
2.5-2.99	-	.	8	5	3	.	3	6	1	.	.	40
3.0-3.49	-	.	.	1	.	.	.	1	.	.	.	8
3.5-3.99	-	.	.	.	.	.	.	.	.	.	.	1
4.0-4.49	-	.	.	.	.	.	.	.	.	.	.	1
4.5-4.99	-	.	.	.	.	.	.	.	.	.	.	0
5.00+	-	.	.	.	.	.	.	.	.	.	.	0
TOTAL		2484	2650	1504	671	770	725	378	50	1	0	58440

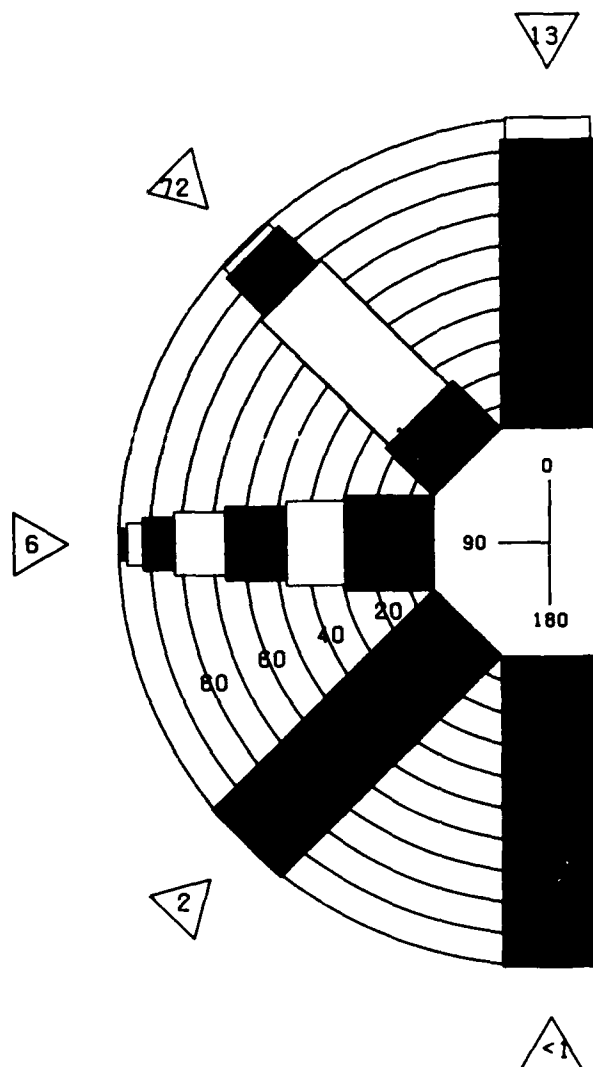
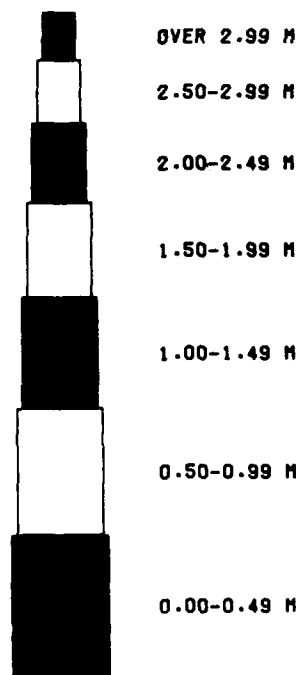
MEAN HS(M) = 0.65 LARGEST HS(M) = 5.47 MEAN TP(SEC) = 8.1 TOTAL CASES = 58440

STATION 125

20 YEARS

SHORELINE ANGLE = 110°

WATER DEPTH = 10 M



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 125 (35.45N/ 121.01W TO 35.41N/ 120.91W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
YEAR													
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.8	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 125 (35.45N/ 121.01W TO 35.41N/ 120.91W)

	MONTH												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
YEAR													
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1967	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1969	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1970	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

20 YR. STATISTICS FOR PACIFIC STATION125 (35.45N/ 121.01W TO 35.41N/ 120.91W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.7
MEAN PEAK WAVE PERIOD	(SECONDS)	3.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.5
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.5
LARGEST WAVE HS	(METERS)	1.5
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	3.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	30.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		59021606

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0. - 14.9
 LAT. LONG. START = 35.41N/120.91W LAT. LONG. END = 35.23N/120.88W
 SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	PERIOD (SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	0	
0.50 - 0.99	0	
1.00 - 1.49	0	
1.50 - 1.99	0	
2.00 - 2.49	0	
2.50 - 2.99	0	
3.00 - 3.49	0	
3.50 - 3.99	0	
4.00 - 4.49	0	
4.50 - 4.99	0	
5.00 +	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LONG. START = 35.41N/120.91W LAT. LONG. END = 35.23N/120.88W
 SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	PERIOD (SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	0	
0.50 - 0.99	0	
1.00 - 1.49	0	
1.50 - 1.99	0	
2.00 - 2.49	0	
2.50 - 2.99	0	
3.00 - 3.49	0	
3.50 - 3.99	0	
4.00 - 4.49	0	
4.50 - 4.99	0	
5.00 +	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LONG. START = 35.41N/120.91W LAT. LONG. END = 35.23N/120.88W
 SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	PERIOD (SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	.	.	.	.	.	.	.	.	.	14
0.50 - 0.99	.	.	.	.	.	.	.	.	.	119
1.00 - 1.49	349	516	193	15	20	7	.	.	.	1119	
1.50 - 1.99	1398	1392	487	25	42	30	.	.	.	3224	
2.00 - 2.49	877	1093	390	90	73	75	10	.	.	2598	
2.50 - 2.99	.	193	208	22	18	27	6	.	.	474	
3.00 - 3.49	.	11	32	8	3	1	.	.	.	56	
3.50 - 3.99	.	.	3	6	.	.	.	.	.	10
4.00 - 4.49	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	0
TOTAL	2634	3209	1314	206	165	150	17	0	0	0	

MEAN HS(M) = 1.42 LARGEST HS(M) = 3.36 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 4508

PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LONG. START = 35.41N/120.91W LAT. LONG. END = 35.23N/120.88W
 SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	PERIOD (SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	17	10	65	5	1	5	.	.	.	109	
0.50 - 0.99	284	1984	4043	900	350	148	18	.	.	7738	
1.00 - 1.49	439	3370	6928	4389	3052	977	165	23	.	19346	
1.50 - 1.99	874	3482	2876	3536	5090	2790	689	35	.	19447	
2.00 - 2.49	58	2465	1350	1921	4644	4048	1216	143	.	15879	
2.50 - 2.99	.	665	823	646	2811	4327	1480	165	3	10963	
3.00 - 3.49	.	75	296	177	970	3803	1647	222	27	7217	
3.50 - 3.99	.	3	44	61	231	1955	1960	164	18	4436	
4.00 - 4.49	.	.	6	5	13	739	1947	147	1	2858	
4.50 - 4.99	.	.	.	.	.	177	1252	207	.	1636
5.00 +	.	.	.	.	.	131	816	170	.	1980
TOTAL	1672	12054	16431	11640	17162	18982	11506	1988	174	0	

MEAN HS(M) = 2.19 LARGEST HS(M) = 6.68 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 53560

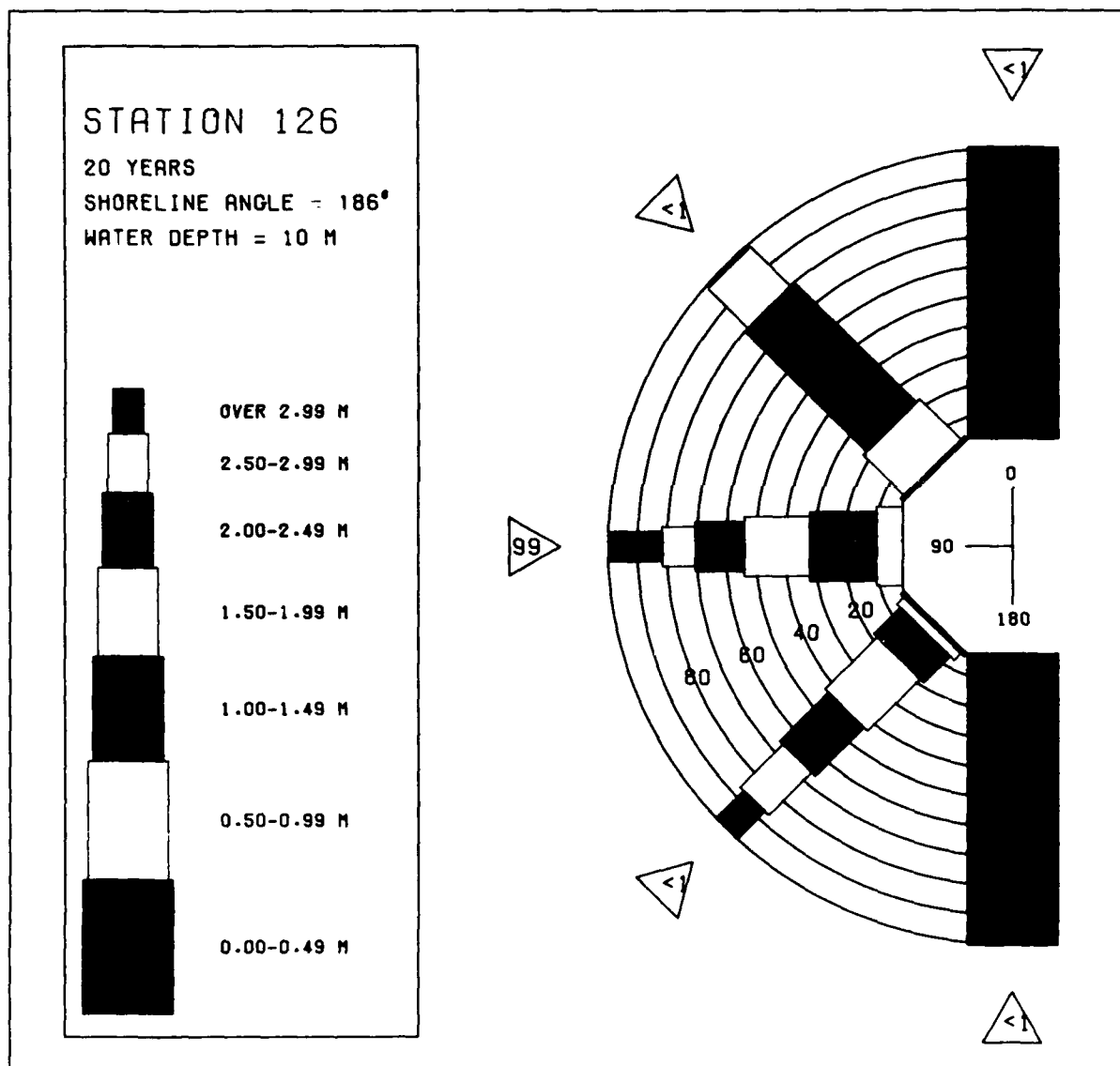
PHASE 3 ST. 126 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
 SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	
0.1	0	0	0	0	0	0	0	0	0	0	
0.2	0	0	0	0	0	0	0	0	0	0	
0.3	0	0	0	0	0	0	0	0	0	0	
0.4	0	0	0	0	0	0	0	0	0	0	
0.5	0	0	0	0	0	0	0	0	0	0	
0.6	0	0	0	0	0	0	0	0	0	0	
0.7	0	0	0	0	0	0	0	0	0	0	
0.8	0	0	0	0	0	0	0	0	0	0	
0.9	0	0	0	0	0	0	0	0	0	0	
1.0	0	0	0	0	0	0	0	0	0	0	
1.1	0	0	0	0	0	0	0	0	0	0	
1.2	0	0	0	0	0	0	0	0	0	0	
1.3	0	0	0	0	0	0	0	0	0	0	
1.4	0	0	0	0	0	0	0	0	0	0	
1.5	0	0	0	0	0	0	0	0	0	0	
1.6	0	0	0	0	0	0	0	0	0	0	
1.7	0	0	0	0	0	0	0	0	0	0	
1.8	0	0	0	0	0	0	0	0	0	0	
1.9	0	0	0	0	0	0	0	0	0	0	
2.0	0	0	0	0	0	0	0	0	0	0	
2.1	0	0	0	0	0	0	0	0	0	0	
2.2	0	0	0	0	0	0	0	0	0	0	
2.3	0	0	0	0	0	0	0	0	0	0	
2.4	0	0	0	0	0	0	0	0	0	0	
2.5	0	0	0	0	0	0	0	0	0	0	
2.6	0	0	0	0	0	0	0	0	0	0	
2.7	0	0	0	0	0	0	0	0	0	0	
2.8	0	0	0	0	0	0	0	0	0	0	
2.9	0	0	0	0	0	0	0	0	0	0	
3.0	0	0	0	0	0	0	0	0	0	0	
3.1	0	0	0	0	0	0	0	0	0	0	
3.2	0	0	0	0	0	0	0	0	0	0	
3.3	0	0	0	0	0	0	0	0	0	0	
3.4	0	0	0	0	0	0	0	0	0	0	
3.5	0	0	0	0	0	0	0	0	0	0	
3.6	0	0	0	0	0	0	0	0	0	0	
3.7	0	0	0	0	0	0	0	0	0	0	
3.8	0	0	0	0	0	0	0	0	0	0	
3.9	0	0	0	0	0	0	0	0	0	0	
4.0	0	0	0	0	0	0	0	0	0	0	
4.1	0	0	0	0	0	0	0	0	0	0	
4.2	0	0	0	0	0	0	0	0	0	0	
4.3	0	0	0	0	0	0	0	0	0	0	
4.4	0	0	0	0	0	0	0	0	0	0	
4.5	0	0	0	0	0	0	0	0	0	0	
4.6	0	0	0	0	0	0	0	0	0	0	
4.7	0	0	0	0	0	0	0	0	0	0	
4.8	0	0	0	0	0	0	0	0	0	0	
4.9	0	0	0	0	0	0	0	0	0	0	
5.0	0	0	0	0	0	0	0	0	0	0	
5.1	0	0	0	0	0	0	0	0	0	0	
5.2	0	0	0	0	0	0	0	0	0	0	
5.3	0	0	0	0	0	0	0	0	0	0	
5.4	0	0	0	0	0	0	0	0	0	0	
5.5	0	0	0	0	0	0	0	0	0	0	
5.6	0	0	0	0	0	0	0	0	0	0	
5.7	0	0	0	0	0	0	0	0	0	0	
5.8	0	0	0	0	0	0	0	0	0	0	
5.9	0	0	0	0	0	0	0	0	0	0	
6.0	0	0	0	0	0	0	0	0	0	0	
6.1	0	0	0	0	0	0	0	0	0	0	
6.2	0	0	0	0	0	0	0	0	0	0	
6.3	0	0	0	0	0	0	0	0	0	0	
6.4	0	0	0	0	0	0	0	0	0	0	
6.5	0	0	0	0	0	0	0	0	0	0	
6.6	0	0	0	0	0	0	0	0	0	0	
6.7	0	0	0	0	0	0	0	0	0	0	
6.8	0	0	0	0	0	0	0	0	0	0	
6.9	0	0	0	0	0	0	0	0	0	0	
7.0	0	0	0	0	0	0	0	0	0	0	
7.1	0	0	0	0	0	0	0	0	0	0	
7.2	0	0	0	0	0	0	0	0	0	0	
7.3	0	0	0	0	0	0	0	0	0	0	
7.4	0	0	0	0	0	0	0	0	0	0	
7.5	0	0	0	0	0	0	0	0	0	0	
7.6	0	0	0	0	0	0	0	0	0	0	
7.7	0	0	0	0	0	0	0	0	0	0	
7.8	0	0	0	0	0	0	0	0	0	0	
7.9	0	0	0	0	0	0	0	0	0	0	
8.0	0	0	0	0	0	0	0	0	0	0	
8.1	0	0	0	0	0	0	0	0	0	0	
8.2	0	0	0	0	0	0	0	0	0	0	
8.3	0	0	0	0	0	0	0	0	0	0	
8.4	0	0	0	0	0	0	0	0	0	0	
8.5	0	0	0	0	0	0	0	0	0	0	
8.6	0	0	0	0	0	0	0	0	0	0	
8.7	0	0	0	0	0	0	0	0	0	0	
8.8	0	0	0	0	0	0	0	0	0	0	
8.9	0	0	0	0	0	0	0	0	0	0	
9.0	0	0	0	0	0	0	0	0	0	0	
9.1	0	0	0	0	0	0	0	0	0	0	
9.2	0	0	0	0	0	0	0	0	0	0	
9.3	0	0	0	0	0	0	0	0	0	0	
9.4	0	0	0	0	0	0	0	0	0	0	
9.5	0	0	0	0	0	0	0	0	0	0	
9.6	0	0	0	0	0	0	0	0	0	0	
9.7	0	0	0	0	0	0	0	0	0	0	
9.8	0	0	0	0	0	0	0	0	0	0	
9.9	0	0	0	0	0	0	0	0	0	0	
10.0	0	0	0	0	0	0	0	0	0	0	
10.1	0	0	0	0	0	0	0	0	0	0	
10.2	0	0	0	0	0	0	0	0	0	0	
10.3	0	0	0	0	0	0	0	0	0	0	
10.4	0	0	0	0	0	0	0	0	0	0	
10.5	0	0	0	0	0	0	0	0	0	0	
10.6	0	0	0	0	0	0	0	0	0	0	
10.7	0	0	0	0	0	0	0	0	0	0	
10.8	0	0	0	0	0	0	0	0	0	0	
10.9	0	0	0	0	0	0	0	0	0	0	
11.0	0	0	0	0	0	0	0	0	0	0	
11.1	0	0	0	0	0	0	0	0	0	0	
11.2	0	0	0	0	0	0	0	0	0	0	
11.3	0	0	0	0	0	0	0	0	0	0	
11.4	0	0	0	0	0	0	0	0	0	0	
11.5	0	0	0	0	0	0	0	0	0	0	
11.6	0	0	0	0	0	0	0	0	0	0	
11.7	0	0	0	0	0	0	0	0	0	0	
11.8	0	0	0	0	0	0	0	0	0	0	
11.9	0	0	0	0	0	0	0	0	0	0	
12.0	0	0	0	0	0	0	0	0	0	0	
12.1	0	0	0	0	0	0	0	0	0	0	
12.2	0	0	0	0	0	0	0	0	0	0	
12.3	0	0	0	0	0	0	0	0	0	0	
12.4	0	0	0	0	0	0	0	0	0	0	
12.5	0	0	0	0	0	0	0	0	0	0	
12.6	0	0	0	0	0	0	0	0	0	0	
12.7	0	0	0	0	0	0	0	0	0	0	
12.8	0	0	0	0	0	0	0	0	0	0	
12.9	0	0	0	0	0	0	0	0	0	0	
13.0	0	0	0	0	0	0	0	0	0	0	
13.1	0	0	0	0	0	0	0	0	0	0	
13.2	0	0	0	0	0	0	0	0	0	0	
13.3	0	0	0	0	0	0	0	0	0	0	
13.4	0	0	0	0	0	0	0	0	0	0	
13.5	0	0	0	0	0	0	0	0	0	0	
13.6	0	0	0	0	0	0	0	0	0	0	
13.7	0	0	0	0	0	0	0	0	0	0	
13.8	0	0	0	0	0	0	0	0	0	0	
13.9	0	0	0	0	0	0	0	0	0	0	
14.0	0	0	0	0	0	0	0	0	0	0	
14.1	0	0	0	0	0	0	0	0	0	0	
14.2	0	0	0	0	0	0	0	0	0	0	
14.3	0	0	0	0	0	0	0	0	0	0	
14.4	0	0	0	0	0	0	0	0	0	0	
14.5	0	0	0	0	0	0	0	0	0	0	
14.6	0	0	0	0	0	0	0	0	0	0	
14.7	0	0	0	0	0	0	0	0	0	0	
14.8	0	0	0	0	0	0	0	0	0	0	
14.9	0	0	0	0	0	0	0	0	0	0	
15.0	0	0	0	0	0	0	0	0	0	0	
15.1	0	0	0	0	0	0	0	0	0	0	
15.2	0	0	0	0	0	0	0	0	0	0	
15.3	0	0	0	0	0	0	0	0	0	0	
15.4	0	0	0	0	0	0	0	0	0	0	
15.5	0	0	0	0	0	0	0	0	0	0	
15.6	0	0	0	0	0	0	0	0	0	0	
15.7	0	0	0	0	0	0	0	0	0	0	
15.8	0	0	0	0	0	0	0	0	0	0	
15.9	0	0	0	0	0	0	0	0	0	0	
16.0	0	0	0	0	0	0	0	0	0	0	
16.1	0	0	0	0	0	0	0	0	0	0	
16.2	0	0	0	0</							

PHASE 3 ST. 126 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 35.41N/120.91W LAT. LON. END= 35.23N/120.88W
 SHORELINE ANGLE = 186.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.00-0.49	185	250	424	446	310	16	1	1	1	1	10
0.50-0.99	178	479	742	446	516	286	17	2	2	2	884
1.00-1.49	6	274	329	364	466	408	68	14	14	14	2281
1.50-1.99	..	76	158	196	281	433	148	16	16	16	1647
2.00-2.49	..	8	32	67	97	195	164	22	22	22	1114
2.50-2.99	..	..	6	18	23	73	196	14	14	14	723
3.00-3.49	..	..	..	6	1	17	125	20	20	20	443
3.50-3.99	..	..	..	..	..	113	81	14	14	14	282
4.00-4.49	..	..	..	..	..	1	1	1	1	1	162
4.50-4.99	..	..	..	..	..	..	..	..	..	..	197
TOTAL	436	1552	1786	1188	1731	1909	1148	194	14	0	58440

MEAN HS(M) = 2.13 LARGEST HS(M) = 6.68 MEAN TP(SEC) = 10.4 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR

WIS STATION 126 (35.41N/ 120.91W TO 35.23N/ 120.88W)

MONTH

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

MEAN

YEAR 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1

MEAN

MEAN	2.9	3.0	2.5	2.2	1.8	1.7	1.4	1.3	1.4	1.8	2.5	3.1
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LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 126 (35.41N/ 120.91W TO 35.23N/ 120.88W)

MONTH

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

YEAR 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION126 (35.41N/ 120.91W TO 35.23N/ 120.88W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.1
MEAN PEAK WAVE PERIOD	(SECONDS)	9.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.6
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	83.4
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040300

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 35.23N/120.88W LAT. LON. END = 35.16N/120.81W
 SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	304	0	0	0	0	0	0	0	0	0	304
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00-5.49	0	0	0	0	0	0	0	0	0	0	0
5.50-5.99	0	0	0	0	0	0	0	0	0	0	0
6.00-6.49	0	0	0	0	0	0	0	0	0	0	0
6.50-6.99	0	0	0	0	0	0	0	0	0	0	0
7.00-7.49	0	0	0	0	0	0	0	0	0	0	0
7.50-7.99	0	0	0	0	0	0	0	0	0	0	0
8.00-8.49	0	0	0	0	0	0	0	0	0	0	0
8.50-8.99	0	0	0	0	0	0	0	0	0	0	0
9.00-9.49	0	0	0	0	0	0	0	0	0	0	0
9.50-9.99	0	0	0	0	0	0	0	0	0	0	0
10.00-10.49	0	0	0	0	0	0	0	0	0	0	0
10.50-10.99	0	0	0	0	0	0	0	0	0	0	0
11.00-11.49	0	0	0	0	0	0	0	0	0	0	0
11.50-11.99	0	0	0	0	0	0	0	0	0	0	0
12.00-12.49	0	0	0	0	0	0	0	0	0	0	0
12.50-12.99	0	0	0	0	0	0	0	0	0	0	0
13.00-13.49	0	0	0	0	0	0	0	0	0	0	0
13.50-13.99	0	0	0	0	0	0	0	0	0	0	0
14.00-14.49	0	0	0	0	0	0	0	0	0	0	0
14.50-14.99	0	0	0	0	0	0	0	0	0	0	0
15.00-15.49	0	0	0	0	0	0	0	0	0	0	0
15.50-15.99	0	0	0	0	0	0	0	0	0	0	0
16.00-16.49	0	0	0	0	0	0	0	0	0	0	0
16.50-16.99	0	0	0	0	0	0	0	0	0	0	0
17.00-17.49	0	0	0	0	0	0	0	0	0	0	0
17.50-17.99	0	0	0	0	0	0	0	0	0	0	0
18.00-18.49	0	0	0	0	0	0	0	0	0	0	0
18.50-18.99	0	0	0	0	0	0	0	0	0	0	0
19.00-19.49	0	0	0	0	0	0	0	0	0	0	0
19.50-19.99	0	0	0	0	0	0	0	0	0	0	0
20.00-20.49	0	0	0	0	0	0	0	0	0	0	0
20.50-20.99	0	0	0	0	0	0	0	0	0	0	0
21.00-21.49	0	0	0	0	0	0	0	0	0	0	0
21.50-21.99	0	0	0	0	0	0	0	0	0	0	0
22.00-22.49	0	0	0	0	0	0	0	0	0	0	0
22.50-22.99	0	0	0	0	0	0	0	0	0	0	0
23.00-23.49	0	0	0	0	0	0	0	0	0	0	0
23.50-23.99	0	0	0	0	0	0	0	0	0	0	0
24.00-24.49	0	0	0	0	0	0	0	0	0	0	0
24.50-24.99	0	0	0	0	0	0	0	0	0	0	0
25.00-25.49	0	0	0	0	0	0	0	0	0	0	0
25.50-25.99	0	0	0	0	0	0	0	0	0	0	0
26.00-26.49	0	0	0	0	0	0	0	0	0	0	0
26.50-26.99	0	0	0	0	0	0	0	0	0	0	0
27.00-27.49	0	0	0	0	0	0	0	0	0	0	0
27.50-27.99	0	0	0	0	0	0	0	0	0	0	0
28.00-28.49	0	0	0	0	0	0	0	0	0	0	0
28.50-28.99	0	0	0	0	0	0	0	0	0	0	0
29.00-29.49	0	0	0	0	0	0	0	0	0	0	0
29.50-29.99	0	0	0	0	0	0	0	0	0	0	0
30.00-30.49	0	0	0	0	0	0	0	0	0	0	0
30.50-30.99	0	0	0	0	0	0	0	0	0	0	0
31.00-31.49	0	0	0	0	0	0	0	0	0	0	0
31.50-31.99	0	0	0	0	0	0	0	0	0	0	0
32.00-32.49	0	0	0	0	0	0	0	0	0	0	0
32.50-32.99	0	0	0	0	0	0	0	0	0	0	0
33.00-33.49	0	0	0	0	0	0	0	0	0	0	0
33.50-33.99	0	0	0	0	0	0	0	0	0	0	0
34.00-34.49	0	0	0	0	0	0	0	0	0	0	0
34.50-34.99	0	0	0	0	0	0	0	0	0	0	0
35.00-35.49	0	0	0	0	0	0	0	0	0	0	0
35.50-35.99	0	0	0	0	0	0	0	0	0	0	0
36.00-36.49	0	0	0	0	0	0	0	0	0	0	0
36.50-36.99	0	0	0	0	0	0	0	0	0	0	0
37.00-37.49	0	0	0	0	0	0	0	0	0	0	0
37.50-37.99	0	0	0	0	0	0	0	0	0	0	0
38.00-38.49	0	0	0	0	0	0	0	0	0	0	0
38.50-38.99	0	0	0	0	0	0	0	0	0	0	0
39.00-39.49	0	0	0	0	0	0	0	0	0	0	0
39.50-39.99	0	0	0	0	0	0	0	0	0	0	0
40.00-40.49	0	0	0	0	0	0	0	0	0	0	0
40.50-40.99	0	0	0	0	0	0	0	0	0	0	0
41.00-41.49	0	0	0	0	0	0	0	0	0	0	0
41.50-41.99	0	0	0	0	0	0	0	0	0	0	0
42.00-42.49	0	0	0	0	0	0	0	0	0	0	0
42.50-42.99	0	0	0	0	0	0	0	0	0	0	0
43.00-43.49	0	0	0	0	0	0	0	0	0	0	0
43.50-43.99	0	0	0	0	0	0	0	0	0	0	0
44.00-44.49	0	0	0	0	0	0	0	0	0	0	0
44.50-44.99	0	0	0	0	0	0	0	0	0	0	0
45.00-45.49	0	0	0	0	0	0	0	0	0	0	0
45.50-45.99	0	0	0	0	0	0	0	0	0	0	0
46.00-46.49	0	0	0	0	0	0	0	0	0	0	0
46.50-46.99	0	0	0	0	0	0	0	0	0	0	0
47.00-47.49	0	0	0	0	0	0	0	0	0	0	0
47.50-47.99	0	0	0	0	0	0	0	0	0	0	0
48.00-48.49	0	0	0	0	0	0	0	0	0	0	0
48.50-48.99	0	0	0	0	0	0	0	0	0	0	0
49.00-49.49	0	0	0	0	0	0	0	0	0	0	0
49.50-49.99	0	0	0	0	0	0	0	0	0	0	0
50.00-50.49	0	0	0	0	0	0	0	0	0	0	0
50.50-50.99	0	0	0	0	0	0	0	0	0	0	0
51.00-51.49	0	0	0	0	0	0	0	0	0	0	0
51.50-51.99	0	0	0	0	0	0	0	0	0	0	0
52.00-52.49	0	0	0	0	0	0	0	0	0	0	0
52.50-52.99	0	0	0	0	0	0	0	0	0	0	0
53.00-53.49	0	0	0	0	0	0	0	0	0	0	0
53.50-53.99	0	0	0	0	0	0	0	0	0	0	0
54.00-54.49	0	0	0	0	0	0	0	0	0	0	0
54.50-54.99	0	0	0	0	0	0	0	0	0	0	0
55.00-55.49	0	0	0	0	0	0	0	0	0	0	0
55.50-55.99	0	0	0	0	0	0	0	0	0	0	0
56.00-56.49	0	0	0	0	0	0	0	0	0	0	0
56.50-56.99	0	0	0	0	0	0	0	0	0	0	0
57.00-57.49	0	0	0	0	0	0	0	0	0	0	0
57.50-57.99	0	0	0	0	0	0	0	0	0	0	0
58.00-58.49	0	0	0	0	0	0	0	0	0	0	0
58.50-58.99	0	0	0	0	0	0	0	0	0	0	0
59.00-59.49	0	0	0	0	0	0	0	0	0	0	0
59.50-59.99	0	0	0	0	0	0	0	0	0	0	0
60.00-60.49	0	0	0	0	0	0	0	0	0	0	0
60.50-60.99	0	0	0	0	0	0	0	0	0	0	0
61.00-61.49	0	0	0	0	0	0	0	0	0	0	0
61.50-61.99	0	0	0	0	0	0	0	0	0	0	0
62.00-62.49	0	0	0	0	0	0	0	0	0	0	0
62.50-62.99	0	0	0	0	0	0	0	0	0	0	0
63.00-63.49	0	0	0	0	0	0	0	0	0	0	0
63.50-63.99	0	0	0	0	0	0	0	0	0	0	0
64.00-64.49	0	0	0	0	0	0	0	0	0	0	0
64.50-64.99	0	0	0	0	0	0	0	0	0	0	0
65.00-65.49	0	0	0	0	0	0	0	0	0	0	0
65.50-65.99	0	0	0	0	0	0	0	0	0	0	0
66.00-66.49	0	0	0	0	0	0	0	0	0	0	0
66.50-66.99	0	0	0	0	0	0	0	0	0	0	0
67.00-67.49	0	0	0	0	0	0	0	0	0	0	0
67.50-67.99	0	0	0	0	0	0	0	0	0	0	0
68.00-68.49	0	0	0	0	0</						

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 105.0 - 134.9
 LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
 SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	44	29	37	.	.	.	.	.	.	73
0.50 - 0.99	22	10	10	.	.	.	.	.	.	69
1.00 - 1.49	32	22	18	.	.	.	.	.	.	64
1.50 - 1.99	30	25	18	5	.	.	.	.	.	63
2.00 - 2.49	1	7	18	.	.	.	.	.	.	102
2.50 - 2.99	.	5	6	.	.	.	.	.	.	57
3.00 - 3.49	.	3	13	.	.	.	.	.	.	16
3.50 - 3.99	.	.	1	1	.	.	.	.	.	2
4.00 - 4.49	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	0
TOTAL	129	218	93	6	0	0	0	0	0		

MEAN HS(M) = 1.59 LARGEST HS(M) = 3.73 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 267

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
 LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
 SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	15	13	.	.	.	.	.	.	.	170
0.50 - 0.99	3	1	.	.	.	.	.	.	.	4
1.00 - 1.49	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	.	.	.	.	.	.	.	.	.	0
2.00 - 2.49	.	.	.	.	.	.	.	.	.	0
2.50 - 2.99	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	0
TOTAL	160	14	0	0	0	0	0	0	0		

MEAN HS(M) = 0.16 LARGEST HS(M) = 0.68 MEAN TP(SEC) = 5.1 NUMBER OF CASES = 103

PHASE 3 ST. 127 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
 LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
 SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0. - 0.49	0	
0.50 - 0.99	0	
1.00 - 1.49	0	
1.50 - 1.99	0	
2.00 - 2.49	0	
2.50 - 2.99	0	
3.00 - 3.49	0	
3.50 - 3.99	0	
4.00 - 4.49	0	
4.50 - 4.99	0	
5.00 +	0	
TOTAL	0	0	0	0	0	0	0	0	0		

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 127 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 35.23N/120.88W LAT. LON. END= 35.16N/120.81W
 SHORELINE ANGLE = 126.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	PERIOD(SECONDS)	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	TOTAL
0.00-0.49	133	85	126	223	492	144	21	3	3	1	0	362
0.50-0.99	508	355	204	593	723	721	165	14	14	1	0	3226
1.00-1.49	223	214	225	269	153	500	135	37	37	1	0	1640
1.50-1.99	4	27	45	15	29	168	35	42	42	1	0	721
2.00-2.49	0	3	19	6	1	47	13	34	34	0	0	287
2.50-2.99	0	0	5	3	0	17	5	6	6	0	0	111
3.00-3.49	0	0	0	0	0	2	1	2	2	0	0	28
3.50-3.99	0	0	0	0	0	1	1	1	1	0	0	7
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0	1
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0	0
5.00-5.49	0	0	0	0	0	0	0	0	0	0	0	0
5.50-5.99	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	894	2221	1499	956	1420	1698	1083	167	3	0	0	58440

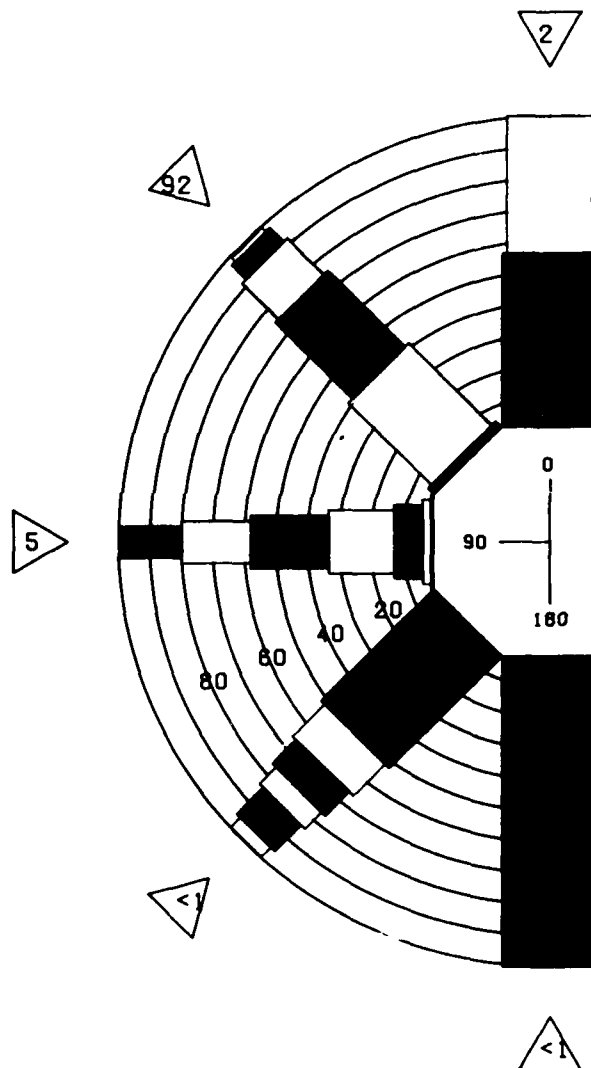
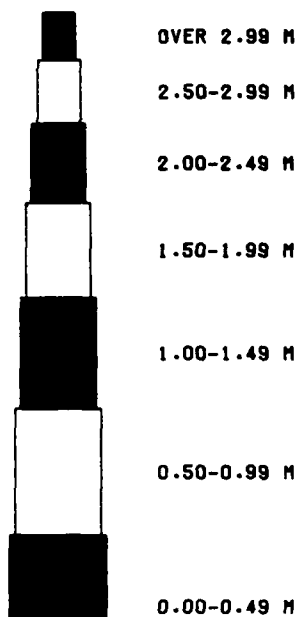
MEAN HS(M) = 1.27 LARGEST HS(M) = 5.55 MEAN TP(SEC) = 9.9 TOTAL CASES = 58440

STATION 127

20 YEARS

SHORELINE ANGLE = 126°

WATER DEPTH = 10 M



MONTH

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 127 (35.23N/ 120.88W TO 35.16N/ 120.81W)

20 YR. STATISTICS FOR PACIFIC STATION127 (35.23N/ 120.88W TO 35.16N/ 120.81W)

E90

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
 SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	6574	0	0	0	0	0	0	0	0	0	
0.50 - 0.99	0	0	0	0	0	0	0	0	0	0	
1.00 - 1.49	0	0	0	0	0	0	0	0	0	0	
1.50 - 1.99	0	0	0	0	0	0	0	0	0	0	
2.00 - 2.49	0	0	0	0	0	0	0	0	0	0	
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	6574	0	0	0	0	0	0	0	0	0	

MEAN HS(M) = 0.09 LARGEST HS(M) = 0.36 MEAN TP(SEC) = 4.7 NUMBER OF CASES = 3842

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
 SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	11386	17392	8343	8	0	0	0	0	0	0	
0.50 - 0.99	1695	10544	3059	3	0	0	0	0	0	0	
1.00 - 1.49	152	405	349	1	0	0	0	0	0	0	
1.50 - 1.99	0	22	1	0	0	0	0	0	0	0	
2.00 - 2.49	0	1	0	0	0	0	0	0	0	0	
2.50 - 2.99	0	0	0	0	0	0	0	0	0	0	
3.00 - 3.49	0	0	0	0	0	0	0	0	0	0	
3.50 - 3.99	0	0	0	0	0	0	0	0	0	0	
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	13233	28364	11751	11	0	0	0	0	0	0	

MEAN HS(M) = 0.43 LARGEST HS(M) = 2.00 MEAN TP(SEC) = 7.0 NUMBER OF CASES = 31186

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
 SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	4340	339	114	3892	2647	423	109	15	0	0	
0.50 - 0.99	4855	354	369	1461	3454	483	1718	160	0	0	
1.00 - 1.49	352	722	326	270	258	701	783	155	0	0	
1.50 - 1.99	53	802	193	90	106	160	164	83	0	0	
2.00 - 2.49	0	256	152	54	47	53	34	0	0	0	
2.50 - 2.99	0	17	106	15	18	17	10	0	0	0	
3.00 - 3.49	0	1	3	5	10	13	0	0	0	0	
3.50 - 3.99	0	0	0	0	5	6	0	0	0	0	
4.00 - 4.49	0	0	0	0	13	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	1324	2191	1282	5788	6545	5869	2818	413	9	0	

MEAN HS(M) = 0.80 LARGEST HS(M) = 4.40 MEAN TP(SEC) = 10.8 NUMBER OF CASES = 15350

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 35.16N/120.81W LAT. LON. END= 35.10N/120.65W
 SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0 - 0.49	14510	1640	0	0	0	0	0	0	0	0	
0.50 - 0.99	4277	180	0	0	0	0	0	0	0	0	
1.00 - 1.49	213	160	0	0	0	0	0	0	0	0	
1.50 - 1.99	17	329	0	0	0	0	0	0	0	0	
2.00 - 2.49	0	116	100	10	0	0	0	0	0	0	
2.50 - 2.99	0	13	97	8	0	0	0	0	0	0	
3.00 - 3.49	0	3	18	20	0	0	0	0	0	0	
3.50 - 3.99	0	0	1	5	0	0	0	0	0	0	
4.00 - 4.49	0	0	0	0	0	0	0	0	0	0	
4.50 - 4.99	0	0	0	0	0	0	0	0	0	0	
5.00 +	0	0	0	0	0	0	0	0	0	0	
TOTAL	2158	785	264	43	8	7	0	3	0	0	

MEAN HS(M) = 0.87 LARGEST HS(M) = 5.55 MEAN TP(SEC) = 5.8 NUMBER OF CASES = 1918

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 35.16N/120.81W LAT. LONG. END = 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.35 MEAN TP(SEC) = 5.0 NUMBER OF CASES = 1540

PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
LAT. LONG. START = 35.16N/120.81W LAT. LONG. END = 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

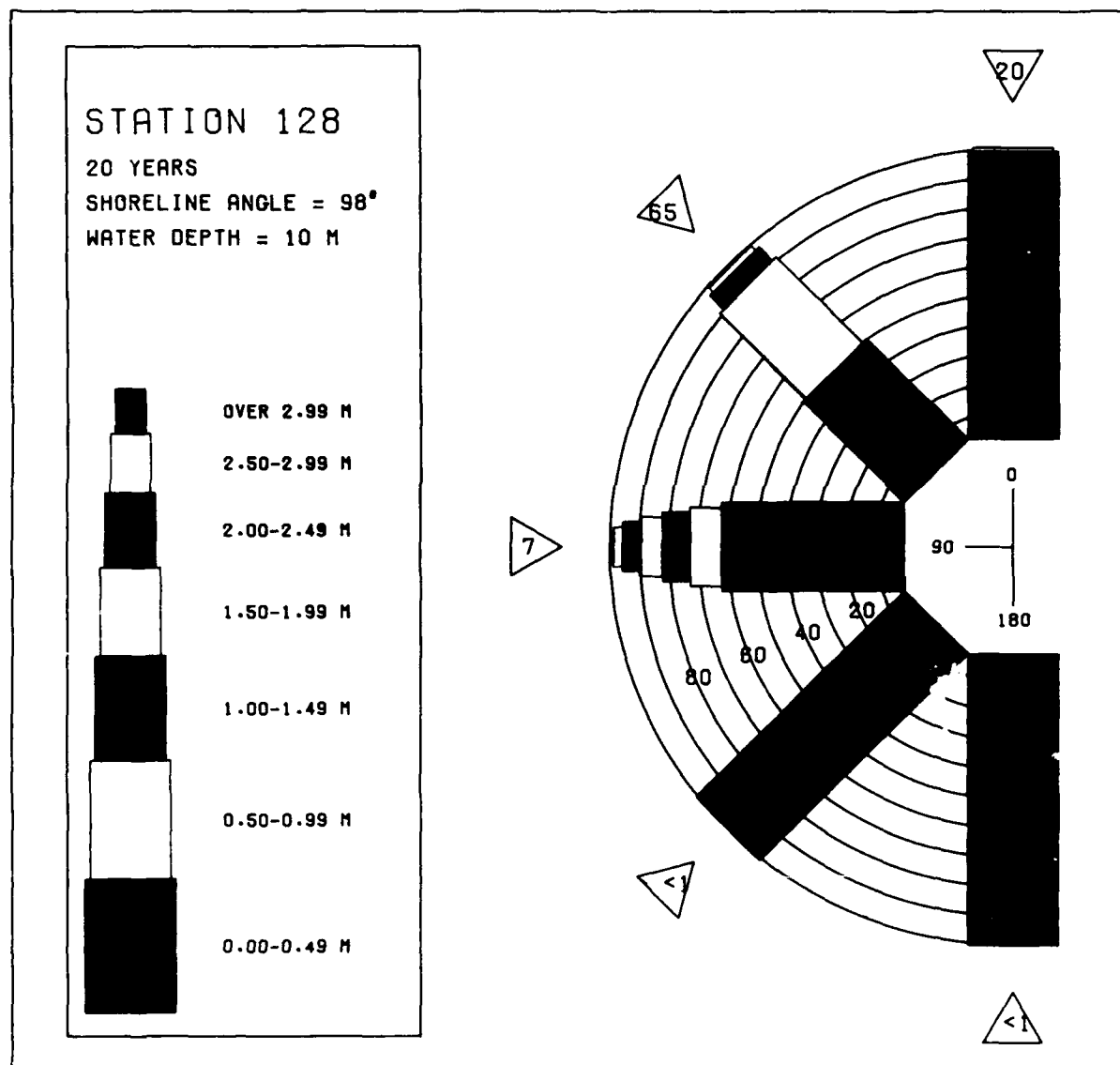
PHASE 3 ST. 128 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LONG. START = 35.16N/120.81W LAT. LONG. END = 35.10N/120.65W
SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 128 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START = 35.16N/120.81W LAT. LON. END = 35.10N/120.65W
 SHORELINE ANGLE = 98.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	2239	1767	845	390	264	72	10	1	...	...	5588
0.50-0.99	265	1097	343	146	345	418	171	16	...	...	2801
1.00-1.49	71	128	67	27	25	70	78	15	...	...	481
1.50-1.99	...	107	22	9	10	16	16	8	...	...	195
2.00-2.49	...	37	20	6	4	5	3	...	...	...	81
2.50-2.99	...	3	3	2	1	1	1	...	...	...	28
3.00-3.49	...	...	...	...	...	...	...	...	...	...	7
3.50-3.99	...	...	...	...	...	...	...	...	...	...	1
4.00-4.49	...	...	...	...	...	...	...	...	...	...	0
4.50-4.99	...	...	...	...	...	...	...	...	...	...	0
5.00+	...	...	...	...	...	...	...	...	...	...	0
TOTAL	2582	3139	1326	582	650	585	279	40	0	0	58440

MEAN HS(M) = 0.47 LARGEST HS(M) = 5.55 MEAN TP(SEC) = 7.8 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION128 (35.16N/ 120.81W TO 35.10N/ 120.65W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	0.5
MEAN PEAK WAVE PERIOD	(SECONDS)	3.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	30.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.4
STANDARD DEVIATION OF WAVE TP	(SECONDS)	0.5
LARGEST WAVE HS	(METERS)	1.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	11.1
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	81.9
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		5902169

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0. - 14.9
 LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	0
0.50 - 0.99	0
1.00 - 1.49	0
1.50 - 1.99	0
2.00 - 2.49	0
2.50 - 2.99	0
3.00 - 3.49	0
3.50 - 3.99	0
4.00 - 4.49	0
4.50 - 4.99	0
5.00 +	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	15	15	15	15	15	15	15	15	15	15	31
0.50 - 0.99	321	1059	1707	71	47	20	.	.	.	.	3265
1.00 - 1.49	2368	3778	3891	422	155	85	.	.	.	.	10733
1.50 - 1.99	1897	6131	2606	701	417	142	54	.	.	.	11924
2.00 - 2.49	46	3185	920	751	316	142	32	.	.	.	5393
2.50 - 2.99	.	532	438	284	234	126	39	.	.	.	1653
3.00 - 3.49	.	32	133	32	121	106	44	.	.	.	468
3.50 - 3.99	.	.	6	8	30	35	46	.	.	.	125
4.00 - 4.49	.	.	.	.	.	6	15	.	.	.	21
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 +	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4687	14719	9716	2269	1320	662	264	0	0	0	31967

MEAN HS(M) = 1.65 LARGEST HS(M) = 4.18 MEAN TP(SEC) = 7.8 NUMBER OF CASES = 19670

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 35.10N/120.65W LAT. LON. END= 34.85N/120.75W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0 - 0.49	3	99	1375	527	172	68	8	5	.	.	10
0.50 - 0.99	22	224	2561	3230	2419	710	106	32	.	.	2257
1.00 - 1.49	102	164	1206	3015	4243	2359	509	63	5	.	9309
1.50 - 1.99	20	503	463	1960	4637	3901	1230	169	34	5	11683
2.00 - 2.49	.	371	532	462	3044	4286	1401	155	22	.	12917
2.50 - 2.99	.	66	328	116	1055	4041	1813	184	29	.	10273
3.00 - 3.49	.	.	65	23	296	2174	2022	162	11	.	7632
3.50 - 3.99	.	.	11	.	32	932	1983	159	.	.	4753
4.00 - 4.49	.	.	.	.	6	278	1090	207	.	.	3099
4.50 - 4.99	.	.	.	.	.	.	1387	207	.	.	1873
5.00 +	.	.	.	.	.	.	1090	183	.	.	1929
TOTAL	147	1427	6546	9336	15905	18799	11528	1920	127	0	38436

MEAN HS(M) = 2.53 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 11.8 NUMBER OF CASES = 38436

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 35.10N/120.65W LAT. LONG. END = 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	1	.	.	1	.	.	.	.	.	.	1
0.5	6	.	.	.	.	.	.	.	.	.	7
1.0	17	3	5	3	.	.	.	.	.	.	25
1.5	20	6	3	23	.	.	.	.	.	.	43
2.0	3	8	3	11	3	.	.	.	.	.	10
2.5	.	7	0	23	.	10	.	.	.	.	15
3.0	.	3	3	3	.	.	.	.	.	.	5
3.5	.	10	7	3	5	.	.	.	.	.	23
4.0	.	1	3	1	3	.	.	.	.	.	10
4.5	.	.	5	5	.	.	.	.	.	.	0
5.0	.	.	.	.	.	.	.	.	.	.	0
TOTAL	47	229	164	67	11	10	0	0	0	0	317
MEAN HS(M) = 2.39 LARGEST HS(M) = 4.41 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 317											

PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LONG. START= 35.10N/120.65W LAT. LONG. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00 - 0.49	3	6	.	.	.	.	.	.	.	.	9
0.50 - 0.99	.	.	.	.	.	.	.	.	.	.	0
1.00 - 1.49	.	.	.	.	.	.	.	.	.	.	0
1.50 - 1.99	1	.	.	.	.	.	.	.	.	.	1
2.00 - 2.49	.	1	.	.	.	.	.	.	.	.	1
2.50 - 2.99	.	.	.	.	.	.	.	.	.	.	0
3.00 - 3.49	.	.	.	.	.	.	.	.	.	.	0
3.50 - 3.99	.	.	.	.	.	.	.	.	.	.	0
4.00 - 4.49	.	.	.	.	.	.	.	.	.	.	0
4.50 - 4.99	.	.	.	.	.	.	.	.	.	.	0
5.00 - 5.49	.	.	.	.	.	.	.	.	.	.	0
5.50 - 5.99	.	.	.	.	.	.	.	.	.	.	0
TOTAL	4	7	0	0	0	0	0	0	0	0	8
MEAN HS(M) = 0.57 LARGEST HS(M) = 2.00 MEAN TP(SEC) = 6.3 NUMBER OF CASES = 8											

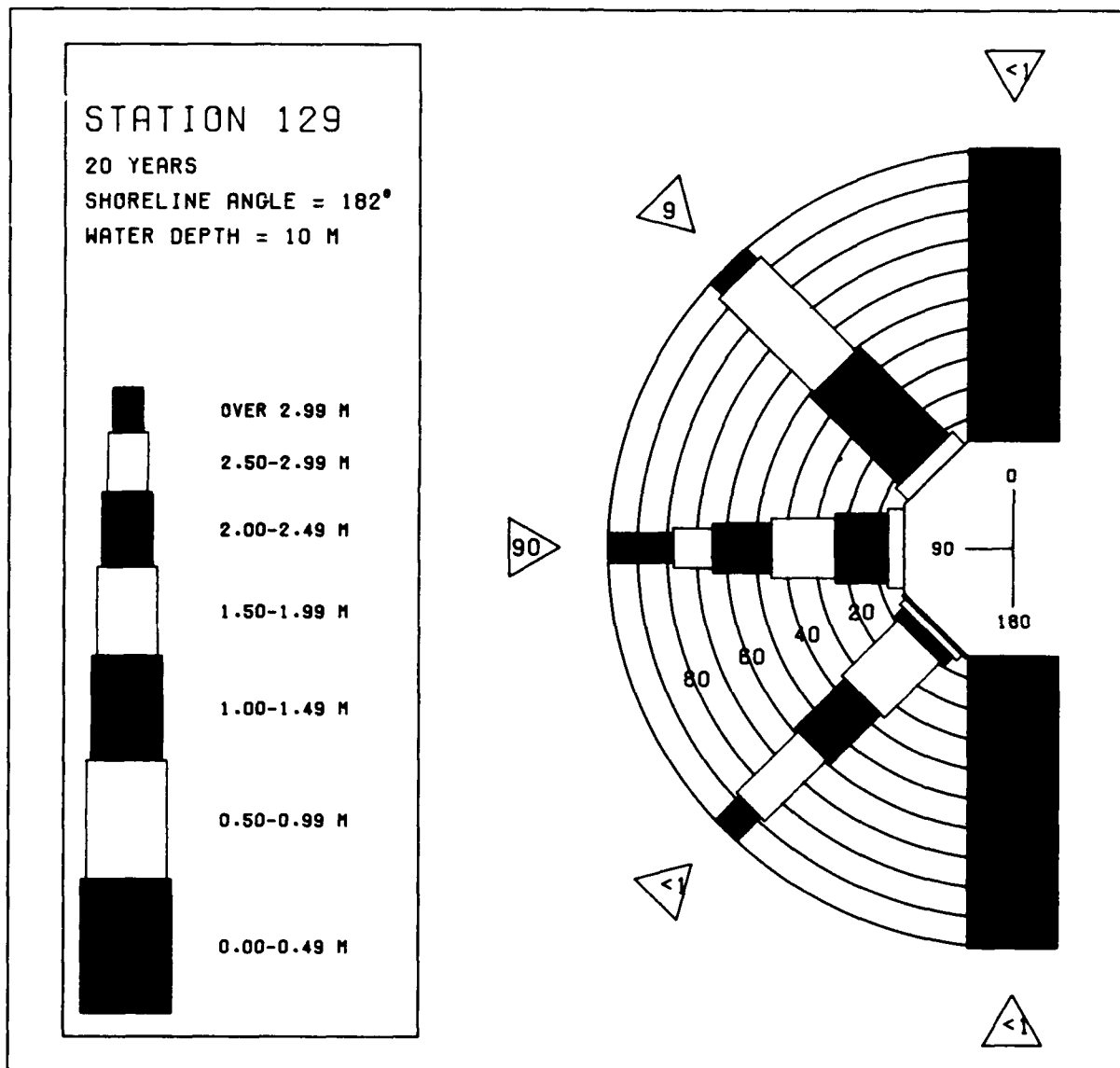
PHASE 3 ST. 129 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LONG. START= 35.10N/120.65W LAT. LONG. END= 34.85N/120.75W
SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	6
0.1	0	0	0	0	0	0	0	0	0	0	0
0.2	0	0	0	0	0	0	0	0	0	0	0
0.3	0	0	0	0	0	0	0	0	0	0	0
0.4	0	0	0	0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0	0	0	0	0
0.6	0	0	0	0	0	0	0	0	0	0	0
0.7	0	0	0	0	0	0	0	0	0	0	0
0.8	0	0	0	0	0	0	0	0	0	0	0
0.9	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6	0	0	0	0	0	0	0	0	0	6
MEAN HS(M) = 0.06 LARGEST HS(M) = 0.09 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 6											

PHASE 3 ST. 129 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START= 35.10N/120.65W LAT. LONG. END= 34.85N/120.75W
 SHORELINE ANGLE = 182.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0-0.49	37	115	308	60	22	8	14	3	..	..	4
0.5-0.99	240	400	645	365	257	79	126	66	..	..	550
1.0-1.49	202	336	384	374	466	250	156	116	..	..	2003
1.5-1.99	..	375	141	272	405	404	144	165	..	..	1839
2.0-2.49	..	10	100	77	327	442	185	155	..	..	1206
2.5-2.99	..	..	49	15	118	414	197	165	..	..	811
3.0-3.49	..	..	1	3	33	221	206	155	..	..	489
3.5-3.99	..	..	..	..	3	63	197	155	..	..	309
4.0-4.49	..	..	..	..	..	27	138	206	..	..	185
4.5-4.99	..	..	..	..	..	100	100	155	..	..	192
5.0-5.49	..	..	..	..	..	..	..	..	..	..	..
TOTAL	488	1635	1639	1166	1721	1943	1175	167	10	0	58440

MEAN HS(M) = 2.23 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 10.4 TOTAL CASES = 58440



MONTH

MEAN 0.0

MONTH

20 YR. STATISTICS FOR PACIFIC STATION129 (35.10N/ 120.65W TO 34.85N/ 120.75W)

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MEAN SIGNIFICANT WAVE HEIGHT (METERS)
PEAK PERIOD (SECONDS)
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND (DEGREES)
STANDARD DEVIATION OF WAVE HS (METERS)
STANDARD DEVIATION OF WAVE TP (SECONDS)
WAVE HS (METERS)
WAVE TP (SECONDS)
AVERAGE DIRECTION WITH LARGEST WAVE HS (DEGREES)
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) (YR,MO,DA,HR)

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58040300

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 0 - 14.9
 LAT. LON. START = 34.85N/120.75W LAT. LON. END = 34.81N/120.68W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	58	0	0	0	0	0	0	0	0	0	58
0.50-0.99	0	0	0	0	0	0	0	0	0	0	0
1.00-1.49	0	0	0	0	0	0	0	0	0	0	0
1.50-1.99	0	0	0	0	0	0	0	0	0	0	0
2.00-2.49	0	0	0	0	0	0	0	0	0	0	0
2.50-2.99	0	0	0	0	0	0	0	0	0	0	0
3.00-3.49	0	0	0	0	0	0	0	0	0	0	0
3.50-3.99	0	0	0	0	0	0	0	0	0	0	0
4.00-4.49	0	0	0	0	0	0	0	0	0	0	0
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	58	0	0	0	0	0	0	0	0	0	58

MEAN HS(M) = 0.15 LARGEST HS(M) = 0.50 MEAN TP(SEC) = 4.6 NUMBER OF CASES = 34

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 15.0 - 44.9
 LAT. LON. START = 34.85N/120.75W LAT. LON. END = 34.81N/120.68W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	126	236	15	0	0	0	0	0	0	0	377
0.50-0.99	126	236	15	0	0	0	0	0	0	0	7028
1.00-1.49	126	236	15	0	0	0	0	0	0	0	8998
1.50-1.99	126	236	15	0	0	0	0	0	0	0	3114
2.00-2.49	126	236	15	0	0	0	0	0	0	0	205
2.50-2.99	126	236	15	0	0	0	0	0	0	0	0
3.00-3.49	126	236	15	0	0	0	0	0	0	0	0
3.50-3.99	126	236	15	0	0	0	0	0	0	0	0
4.00-4.49	126	236	15	0	0	0	0	0	0	0	0
4.50-4.99	126	236	15	0	0	0	0	0	0	0	0
5.00+	126	236	15	0	0	0	0	0	0	0	0
TOTAL	6249	13043	435	0	0	0	0	0	0	0	11533

MEAN HS(M) = 1.14 LARGEST HS(M) = 2.81 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 11533

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 45.0 - 74.9
 LAT. LON. START = 34.85N/120.75W LAT. LON. END = 34.81N/120.68W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	10	46	675	104	59	35	11	15	0	0	955
0.50-0.99	10	1486	9885	4596	2883	792	131	17	0	0	19811
1.00-1.49	80	1156	3940	4596	7710	471	886	123	0	0	22967
1.50-1.99	85	1332	1204	4596	4010	6706	2299	171	0	0	16817
2.00-2.49	11	540	747	135	850	4216	1162	294	0	0	9978
2.50-2.99	0	63	102	25	75	1341	2963	270	0	0	4852
3.00-3.49	0	0	15	1	0	1415	1415	143	0	0	1928
3.50-3.99	0	0	0	0	0	225	367	154	0	0	746
4.00-4.49	0	0	0	0	0	5	66	148	0	0	219
4.50-4.99	0	0	0	0	0	0	15	61	0	0	76
5.00+	0	0	0	0	0	0	8	20	0	0	28
TOTAL	196	4626	16568	10432	15587	17816	11323	1801	88	0	45860

MEAN HS(M) = 1.53 LARGEST HS(M) = 5.65 MEAN TP(SEC) = 11.1 NUMBER OF CASES = 45860

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 75.0 - 104.9
 LAT. LON. START = 34.85N/120.75W LAT. LON. END = 34.81N/120.68W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0-0.49	5	10	0	0	0	0	0	0	0	0	5
0.50-0.99	47	10	0	0	0	0	0	0	0	0	58
1.00-1.49	32	114	44	17	17	11	0	0	0	0	208
1.50-1.99	77	174	18	6	13	13	0	0	0	0	304
2.00-2.49	20	212	65	27	13	17	0	0	0	0	346
2.50-2.99	0	155	78	25	13	17	0	0	0	0	278
3.00-3.49	0	41	80	25	13	17	0	0	0	0	149
3.50-3.99	0	0	49	10	3	17	0	0	0	0	64
4.00-4.49	0	0	3	1	1	17	0	0	0	0	27
4.50-4.99	0	0	0	0	0	0	0	0	0	0	0
5.00+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	181	707	337	98	49	45	2	1	1	0	844

MEAN HS(M) = 2.24 LARGEST HS(M) = 5.29 MEAN TP(SEC) = 7.8 NUMBER OF CASES = 844

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. / ON. START = 34.65N/120.75W LAT. / ON. END = 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL	
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER		
0.0	-	0	0	0	0	0	0	0	0	0	0	13	
0.1	-	10	3	0	0	0	0	0	0	0	0	13	
0.2	-	17	16	0	0	0	0	0	0	0	0	23	
0.3	-	22	17	5	0	0	0	0	0	0	0	44	
0.4	-	.	25	23	0	0	0	0	0	0	0	98	
0.5	-	.	17	8	1	0	0	0	0	0	0	34	
0.6	-	.	10	6	0	0	0	0	0	0	0	16	
0.7	-	.	1	1	0	0	0	0	0	0	0	2	
0.8	-	.	0	0	0	0	0	0	0	0	0	0	
0.9	-	.	0	0	0	0	0	0	0	0	0	0	
1.0	-	.	0	0	0	0	0	0	0	0	0	0	
1.1	-	.	0	0	0	0	0	0	0	0	0	0	
1.2	-	.	0	0	0	0	0	0	0	0	0	0	
1.3	-	.	0	0	0	0	0	0	0	0	0	0	
1.4	-	.	0	0	0	0	0	0	0	0	0	0	
1.5	-	.	0	0	0	0	0	0	0	0	0	0	
1.6	-	.	0	0	0	0	0	0	0	0	0	0	
1.7	-	.	0	0	0	0	0	0	0	0	0	0	
1.8	-	.	0	0	0	0	0	0	0	0	0	0	
1.9	-	.	0	0	0	0	0	0	0	0	0	0	
2.0	-	.	0	0	0	0	0	0	0	0	0	0	
2.1	-	.	0	0	0	0	0	0	0	0	0	0	
2.2	-	.	0	0	0	0	0	0	0	0	0	0	
2.3	-	.	0	0	0	0	0	0	0	0	0	0	
2.4	-	.	0	0	0	0	0	0	0	0	0	0	
2.5	-	.	0	0	0	0	0	0	0	0	0	0	
2.6	-	.	0	0	0	0	0	0	0	0	0	0	
2.7	-	.	0	0	0	0	0	0	0	0	0	0	
2.8	-	.	0	0	0	0	0	0	0	0	0	0	
2.9	-	.	0	0	0	0	0	0	0	0	0	0	
3.0	-	.	0	0	0	0	0	0	0	0	0	0	
3.1	-	.	0	0	0	0	0	0	0	0	0	0	
3.2	-	.	0	0	0	0	0	0	0	0	0	0	
3.3	-	.	0	0	0	0	0	0	0	0	0	0	
3.4	-	.	0	0	0	0	0	0	0	0	0	0	
3.5	-	.	0	0	0	0	0	0	0	0	0	0	
3.6	-	.	0	0	0	0	0	0	0	0	0	0	
3.7	-	.	0	0	0	0	0	0	0	0	0	0	
3.8	-	.	0	0	0	0	0	0	0	0	0	0	
3.9	-	.	0	0	0	0	0	0	0	0	0	0	
TOTAL		50	137	43	1	0	0	0	0	0	0	140	
MEAN HS(M) = 2.08		LARGEST HS(M) = 3.73		MEAN TP(SEC) = 7.0		NUMBER OF CASES = 140							

PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
LAT. LONG. START = 34.85N/120.75W LAT. LONG. END = 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

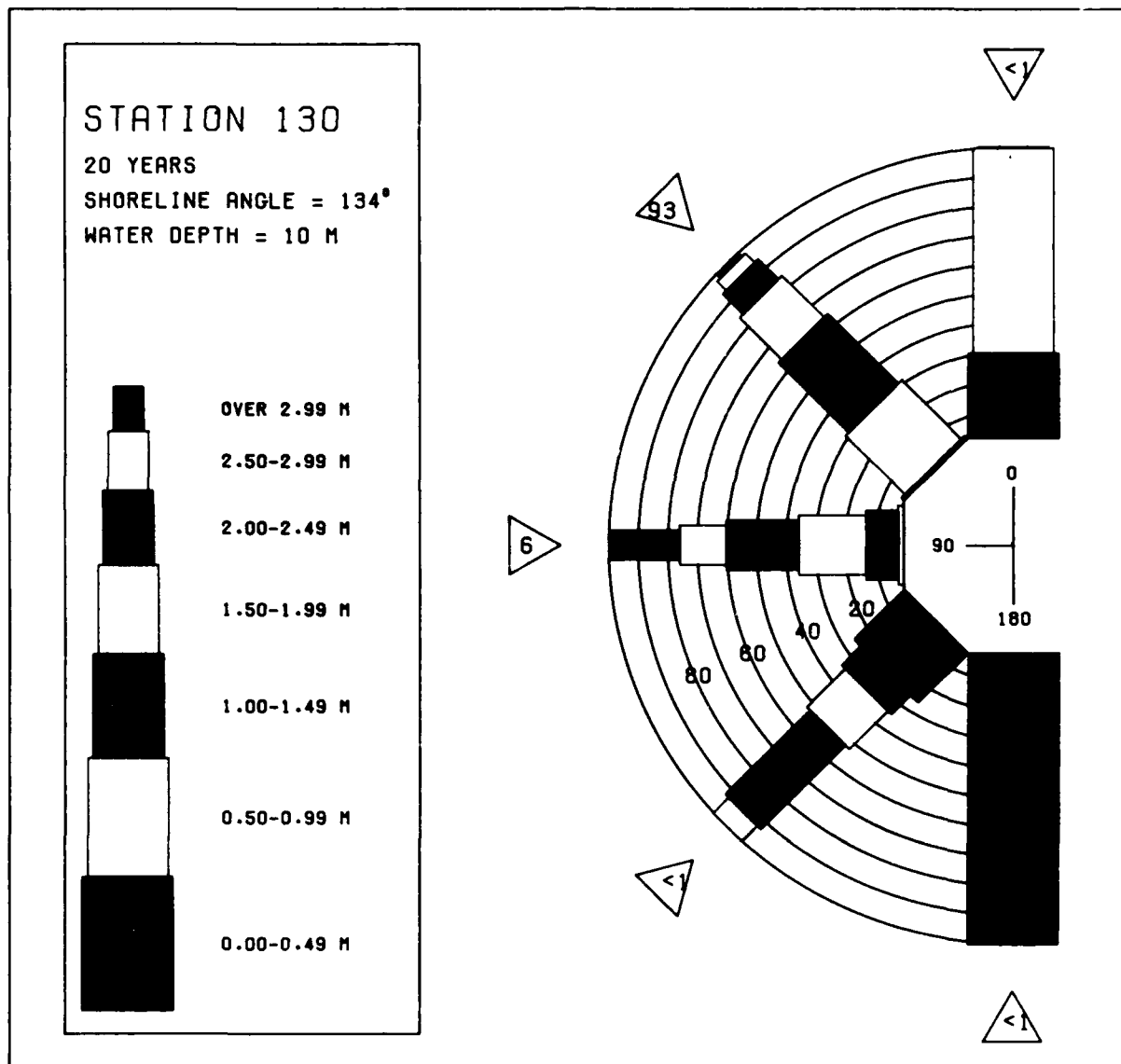
PHASE 3 ST. 130 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
LAT. LONG. START = 34.85N/120.75W LAT. LONG. END = 34.81N/120.68W
SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 130 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LON. START= 34.85N/120.75W LAT. LON. END= 34.81N/120.68W
 SHORELINE ANGLE = 134.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-	6.1-	8.1-	9.6-	10.6-	11.8-	13.4-	15.4-	18.2-	22.3-	TOTAL
0.00	261	577	1008	459	288	79	13	1	1	..	138
0.05	349	677	1299	461	277	447	13	1	1	..	2687
0.10	39	101	185	16	85	671	228	17	3	..	3217
0.15	..	24	108	33	8	135	208	29	1	..	2024
0.20	..	5	5	2	..	235	166	27	2	..	1059
0.25	..	..	..	1	..	141	36	3	..	..	512
0.30	..	..	..	..	..	36	1	..	..	..	279
0.35	..	..	..	..	..	1	..	..	..	..	20
0.40	..	..	..	..	..	..	..	..	..	..	7
0.45	..	..	..	..	..	..	..	..	..	..	2
TOTAL	673	1848	1736	1050	1559	1781	1127	176	7	0	58440

MEAN HS(M) = 1.46 LARGEST HS(M) = 5.65 MEAN TP(SEC)= 10.2 TOTAL CASES = 58440



MEAN HS(METERS) BY MONTH AND YEAR
WIS STATION 130 (34.85N/ 120.75W TO 34.81N/ 120.68W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1957	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1958	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1959	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1960	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1961	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1962	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1964	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1972	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1973	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1975	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEAN	2.0	2.1	1.7	1.5	1.3	1.2	1.1	0.9	0.9	1.2	1.6	2.1	

LARGEST HS(METERS) BY MONTH AND YEAR
WIS STATION 130 (34.85N/ 120.75W TO 34.81N/ 120.68W)

YEAR	MONTH												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1956	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1957	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1958	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1959	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1960	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1961	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1962	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1964	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1972	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1973	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1974	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1975	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

20 YR. STATISTICS FOR PACIFIC STATION130 (34.85N/ 120.75W TO 34.81N/ 120.68W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	1.5
MEAN PEAK WAVE PERIOD	(SECONDS)	10.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	60.0
STANDARD DEVIATION OF WAVE HS	(METERS)	0.7
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.0
LARGEST WAVE HS	(METERS)	5.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	69.8
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		69121318

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0 - 0.49											0
0.50 - 0.99											0
1.00 - 1.49											0
1.50 - 1.99											0
2.00 - 2.49											0
2.50 - 2.99											0
3.00 - 3.49											0
3.50 - 3.99											0
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

MEAN HS(M) = 0. LARGEST HS(M) = 0. MEAN TP(SEC) = 0. NUMBER OF CASES = 0

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0 - 0.49											1
0.50 - 0.99											1136
1.00 - 1.49											3712
1.50 - 1.99											4464
2.00 - 2.49											1466
2.50 - 2.99											257
3.00 - 3.49											56
3.50 - 3.99											4
4.00 - 4.49											0
4.50 - 4.99											0
5.00 +											0
TOTAL	3975	5397	1305	124	160	135	0	0	0	0	6494

MEAN HS(M) = 1.58 LARGEST HS(M) = 3.93 MEAN TP(SEC) = 6.7 NUMBER OF CASES = 6494

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 34.81N/120.68W LAT. LON. END= 34.73N/120.61W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3- LONGER	
0.0 - 0.49											40
0.50 - 0.99											5643
1.00 - 1.49											17676
1.50 - 1.99											18386
2.00 - 2.49											16383
2.50 - 2.99											11380
3.00 - 3.49											7780
3.50 - 3.99											4520
4.00 - 4.49											2992
4.50 - 4.99											1802
5.00 +											1562
TOTAL	1096	10229	16324	11316	16815	18233	11697	1907	127	0	51650

MEAN HS(M) = 2.27 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 10.9 NUMBER OF CASES = 51650

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
 LAT. LONG. START = 34.81N/120.68W LAT. LONG. END = 34.73N/120.61W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	1	3	11	5	1	1	1	1	1	1	1
0.5-0.99	10	3	25	11	1	1	1	1	1	1	29
1.0-1.49	4	25	20	18	6	10	1	1	1	1	63
1.5-1.99	1	7	20	17	1	1	1	1	1	1	107
2.0-2.49	1	20	20	10	6	1	1	1	1	1	122
2.5-2.99	1	1	6	1	3	1	1	1	1	1	75
3.0-3.49	1	1	1	1	1	1	1	1	1	1	46
3.5-3.99	1	1	1	1	1	1	1	1	1	1	11
4.0-4.49	1	1	1	1	1	1	1	1	1	1	11
4.5-4.99	1	1	1	1	1	1	1	1	1	1	11
5.0-5.49	1	1	1	1	1	1	1	1	1	1	11
5.5-5.99	1	1	1	1	1	1	1	1	1	1	11
TOTAL	54	184	124	60	22	16	0	0	0	0	275

MEAN HS(M) = 2.12 LARGEST HS(M) = 3.95 MEAN TP(SEC) = 8.0 NUMBER OF CASES = 275

PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 135.0 - 164.9
 LAT. LONG. START = 34.81N/120.68W LAT. LONG. END = 34.73N/120.61W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	1	1	1	1	1	1	1	1	1	1	4
0.5-0.99	1	1	1	1	1	1	1	1	1	1	10
1.0-1.49	3	5	1	1	1	1	1	1	1	1	18
1.5-1.99	1	1	1	1	1	1	1	1	1	1	10
2.0-2.49	1	1	1	1	1	1	1	1	1	1	10
2.5-2.99	1	1	1	1	1	1	1	1	1	1	10
3.0-3.49	1	1	1	1	1	1	1	1	1	1	10
3.5-3.99	1	1	1	1	1	1	1	1	1	1	10
4.0-4.49	1	1	1	1	1	1	1	1	1	1	10
4.5-4.99	1	1	1	1	1	1	1	1	1	1	10
5.0-5.49	1	1	1	1	1	1	1	1	1	1	10
5.5-5.99	1	1	1	1	1	1	1	1	1	1	10
TOTAL	4	16	0	0	0	0	0	0	0	0	14

MEAN HS(M) = 1.53 LARGEST HS(M) = 2.55 MEAN TP(SEC) = 6.5 NUMBER OF CASES = 14

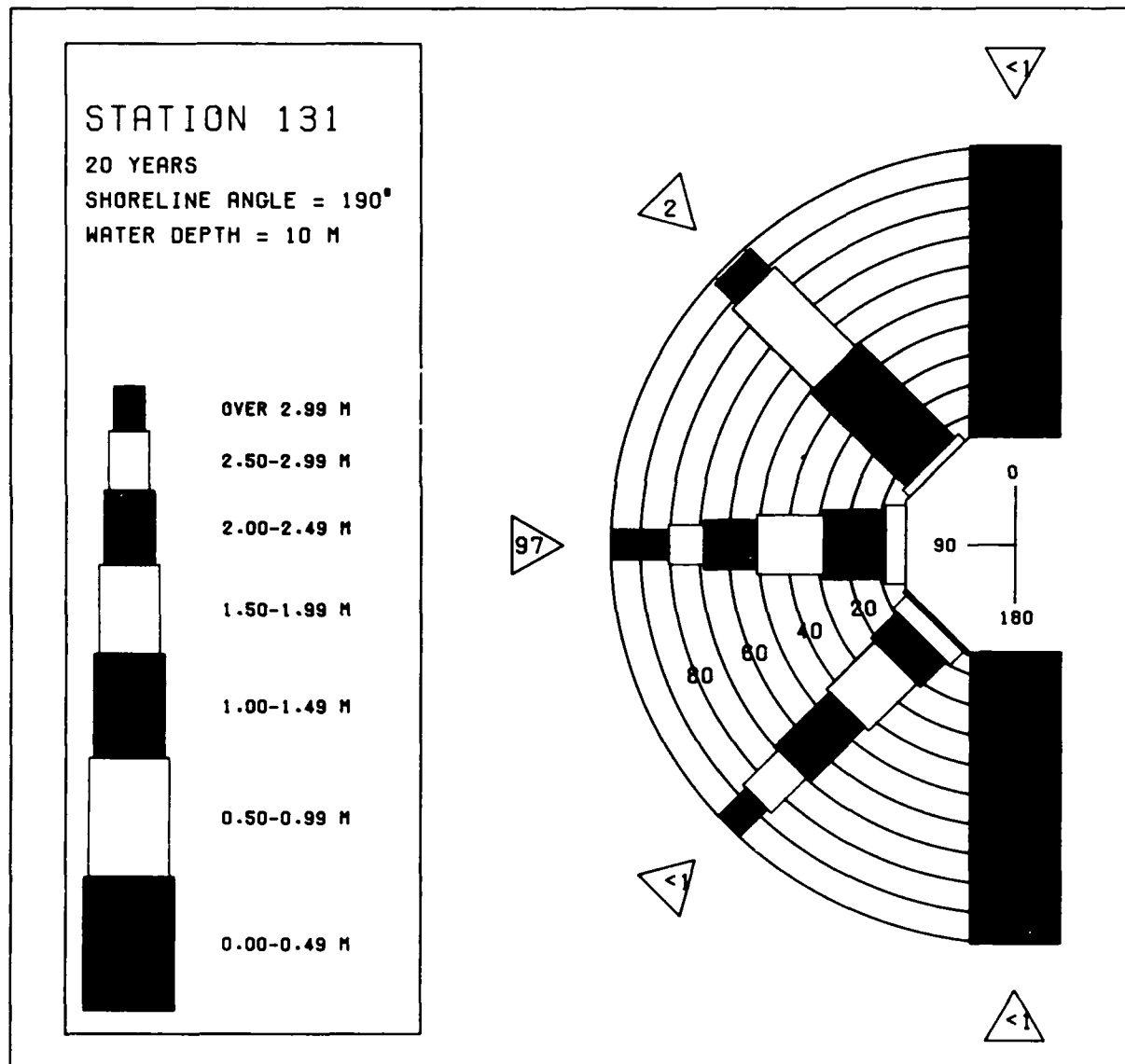
PHASE 3 ST. 131 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 165.0 - 180.0
 LAT. LONG. START = 34.81N/120.68W LAT. LONG. END = 34.73N/120.61W
 SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE (X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT (METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	3	1	1	1	1	1	1	1	1	1	3
0.5-0.99	1	1	1	1	1	1	1	1	1	1	10
1.0-1.49	1	1	1	1	1	1	1	1	1	1	10
1.5-1.99	1	1	1	1	1	1	1	1	1	1	10
2.0-2.49	1	1	1	1	1	1	1	1	1	1	10
2.5-2.99	1	1	1	1	1	1	1	1	1	1	10
3.0-3.49	1	1	1	1	1	1	1	1	1	1	10
3.5-3.99	1	1	1	1	1	1	1	1	1	1	10
4.0-4.49	1	1	1	1	1	1	1	1	1	1	10
4.5-4.99	1	1	1	1	1	1	1	1	1	1	10
5.0-5.49	1	1	1	1	1	1	1	1	1	1	10
5.5-5.99	1	1	1	1	1	1	1	1	1	1	10
TOTAL	3	0	0	0	0	0	0	0	0	0	2

MEAN HS(M) = 0.07 LARGEST HS(M) = 0.08 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 2

PHASE 3 ST. 131 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LONG. START= 34.81N/120.68W LAT. LONG. END= 34.73N/120.61W
SHORELINE ANGLE = 190.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)		PERIOD(SECONDS)									TOTAL	
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0											3
0.1	4											678
0.2	1											2142
0.3	0											2292
0.4	0											1785
0.5	0											1167
0.6	0											785
0.7	0											450
0.8	0											297
0.9	0											179
1.0	0											185
TOTAL		511	1580	1772	1148	1695	1894	1166	187	10	0	
MEAN HS(M) = 2.19		LARGEST HS(M) = 6.72		MEAN TP(SEC) = 10.4		TOTAL CASES =						58440



MONTH

MEAN

MONTH

20 YR. STATISTICS FOR PACIFIC STATION131 (34.81N/ 120.68W TO 34.73N/ 120.61W)

MEAN SIGNIFICANT WAVE HEIGHT	(METERS)	2.2
MEAN PEAK WAVE PERIOD	(SECONDS)	10.4
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND	(DEGREES)	90.0
STANDARD DEVIATION OF WAVE HS	(METERS)	1.0
STANDARD DEVIATION OF WAVE TP	(SECONDS)	2.7
LARGEST WAVE HS	(METERS)	6.7
WAVE TP ASSOCIATED WITH LARGEST WAVE HS	(SECONDS)	14.3
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS	(DEGREES)	84.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR)		58040303

HEIGHT(METERS)		PERIOD(SECONDS) DIRECTION									TOTAL	
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0	-	0
0.5	-	0
1.0	-	0
1.5	-	0
2.0	-	0
2.5	-	0
3.0	-	0
3.5	-	0
4.0	-	0
4.5	-	0
5.0	-	0
5.5	-	0
6.0	-	0
6.5	-	0
7.0	-	0
7.5	-	0
8.0	-	0
8.5	-	0
9.0	-	0
9.5	-	0
10.0	-	0
10.5	-	0
11.0	-	0
11.5	-	0
12.0	-	0
12.5	-	0
13.0	-	0
13.5	-	0
14.0	-	0
14.5	-	0
15.0	-	0
15.5	-	0
16.0	-	0
16.5	-	0
17.0	-	0
17.5	-	0
18.0	-	0
18.5	-	0
19.0	-	0
19.5	-	0
20.0	-	0
20.5	-	0
21.0	-	0
21.5	-	0
22.0	-	0
22.5	-	0
23.0	-	0
23.5	-	0
24.0	-	0
24.5	-	0
25.0	-	0
25.5	-	0
26.0	-	0
26.5	-	0
27.0	-	0
27.5	-	0
28.0	-	0
28.5	-	0
29.0	-	0
29.5	-							

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HEIGHT(METERS)		PERIOD(SECONDS)					DIRECTION			TOTAL	
		4.4-6.0	6.1-8.0	8.1-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	31
0.1	0	0	0	0	0	0	0	0	0	0	43
0.2	0	0	0	0	0	0	0	0	0	0	104
0.3	0	0	0	0	0	0	0	0	0	0	54
0.4	0	0	0	0	0	0	0	0	0	0	27
0.5	0	0	0	0	0	0	0	0	0	0	33
0.6	0	0	0	0	0	0	0	0	0	0	17
0.7	0	0	0	0	0	0	0	0	0	0	53
0.8	0	0	0	0	0	0	0	0	0	0	66
0.9	0	0	0	0	0	0	0	0	0	0	60
1.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		5343	15111	10146	1448	662	246	101	0	0	0
MEAN HS(M) = 1.62		LARGEST HS(M) = 4.08		MEAN TP(SEC) = 7.6		NUMBER OF CASES = 19332					

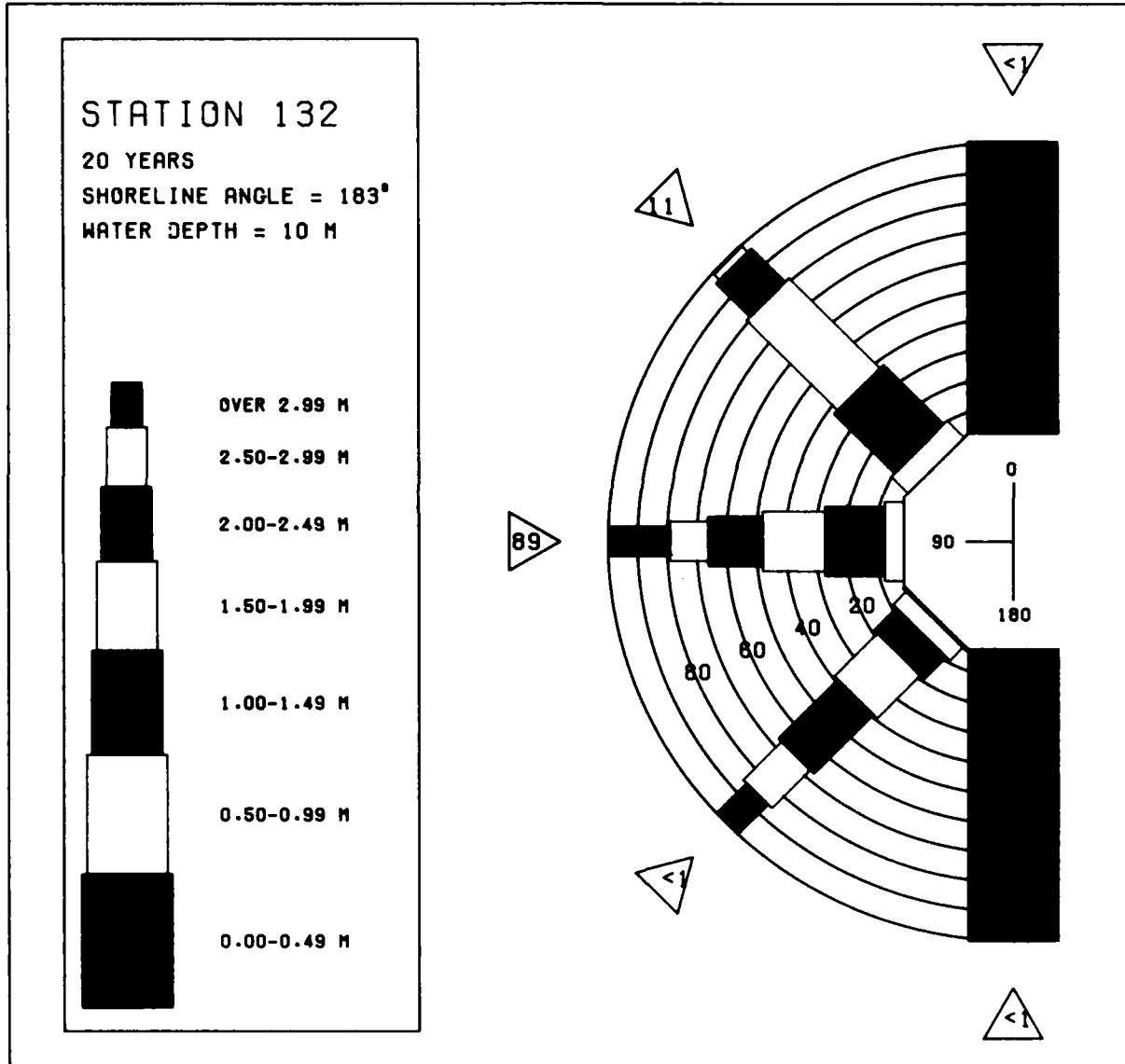
HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.4	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.00	0											10
0.05	0											1
0.10	0											1
0.15	0											1
0.20	0											1
0.25	0											1
0.30	0											1
0.35	0											1
0.40	0											1
0.45	0											1
0.50	0											1
0.55	0											1
0.60	0											1
0.65	0											1
0.70	0											1
0.75	0											1
0.80	0											1
0.85	0											1
0.90	0											1
0.95	0											1
1.00	0											1
1.05	0											1
1.10	0											1
1.15	0											1
1.20	0											1
1.25	0											1
1.30	0											1
1.35	0											1
1.40	0											1
1.45	0											1
1.50	0											1
1.55	0											1
1.60	0											1
1.65	0											1
1.70	0											1
1.75	0											1
1.80	0											1
1.85	0											1
1.90	0											1
1.95	0											1
2.00	0											1
2.05	0											1
2.10	0											1
2.15	0											1
2.20	0											1
2.25	0											1
2.30	0											1
2.35	0											

[illegible][illegible][illegible]

PHASE 3 ST. 132 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 34.73N/120.61W LAT. LONG. END = 34.60N/120.71W
 SHORELINE ANGLE = 183.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	TOTAL
0.0-0.49	148	168	340	60	226	188	100	100	100	100	601
0.50-0.99	177	244	271	400	250	226	100	100	100	100	1009
1.00-1.49	304	440	451	387	270	244	100	100	100	100	1789
1.50-1.99	...	230	133	182	111	100	100	100	100	100	444
2.00-2.49	...	11	57	14	21	100	100	100	100	100	292
2.50-2.99	...	...	1	1	...	100	100	100	100	100	171
3.00-3.49	...	...	...	...	...	100	100	100	100	100	169
3.50-3.99	...	...	...	...	...	100	100	100	100	100	169
4.00-4.49	...	...	...	...	...	100	100	100	100	100	169
4.50-4.99	...	...	...	...	...	100	100	100	100	100	169
5.00-5.49	...	...	...	...	...	100	100	100	100	100	169
5.50-5.99	...	...	...	...	...	100	100	100	100	100	169
TOTAL	559	1618	1738	1124	1678	1887	1163	186	8	0	58440

MEAN HS(M) = 2.18 LARGEST HS(M) = 6.72 MEAN TP(SEC) = 10.4 TOTAL CASES = 58440



MONTH

MEAN

MONTH

YEAR 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS)
MEAN PEAK WAVE PERIOD . . . . . (SECONDS)
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES)
STANDARD DEVIATION OF WAVE HS . . . . . (METERS)
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS)
WARGEST TP . . . . . (SECONDS)
WARGEST HS . . . . . (METERS)
WARGEST TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS)
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . (DEGREES)
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . . .

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58040303

[illegible]

HEIGHT(METERS)	PERIOD(SECONDS)								TOTAL		
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.4	15.4- 18.2	18.2- 22.3	22.3- LONGER	
0.00	2746	1748	1302	5796
0.05	5686	9335	3689	18731
0.10	1351	7351	805	9507
0.15	11	965	441	1417
0.20		25	8	33
0.25				0
0.30				0
0.35				0
0.40				0
0.45				0
0.50				0
0.55				0
0.60				0
0.65				0
0.70				0
0.75				0
0.80				0
0.85				0
0.90				0
0.95				0
TOTAL	9794	19445	6245	0	0	0	0	0	0	0	20741
MEAN HS(M) = 0.84	LARGEST HS(M) = 2.26		MEAN TP(SEC) = 6.8		NUMBER OF CASES = 20741						

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL																																																																																																																																																																																																																																															
		4.4-5.0	5.1-6.0	6.1-7.0	7.1-8.0	8.1-9.0	9.1-10.0	10.1-11.0	11.1-12.0	12.1-13.0	13.1-14.0	14.1-15.0	15.1-16.0	16.1-17.0	17.1-18.0	18.1-19.0	19.1-20.0	20.1-21.0	21.1-22.0	22.1-23.0	23.1-24.0	24.1-25.0	25.1-26.0	26.1-27.0	27.1-28.0	28.1-29.0	29.1-30.0	30.1-31.0	31.1-32.0	32.1-33.0	33.1-34.0	34.1-35.0	35.1-36.0	36.1-37.0	37.1-38.0	38.1-39.0	39.1-40.0	40.1-41.0	41.1-42.0	42.1-43.0	43.1-44.0	44.1-45.0	45.1-46.0	46.1-47.0	47.1-48.0	48.1-49.0	49.1-50.0	50.1-51.0	51.1-52.0	52.1-53.0	53.1-54.0	54.1-55.0	55.1-56.0	56.1-57.0	57.1-58.0	58.1-59.0	59.1-60.0	60.1-61.0	61.1-62.0	62.1-63.0	63.1-64.0	64.1-65.0	65.1-66.0	66.1-67.0	67.1-68.0	68.1-69.0	69.1-70.0	70.1-71.0	71.1-72.0	72.1-73.0	73.1-74.0	74.1-75.0	75.1-76.0	76.1-77.0	77.1-78.0	78.1-79.0	79.1-80.0	80.1-81.0	81.1-82.0	82.1-83.0	83.1-84.0	84.1-85.0	85.1-86.0	86.1-87.0	87.1-88.0	88.1-89.0	89.1-90.0	90.1-91.0	91.1-92.0	92.1-93.0	93.1-94.0	94.1-95.0	95.1-96.0	96.1-97.0	97.1-98.0	98.1-99.0	99.1-100.0	100.1-101.0	101.1-102.0	102.1-103.0	103.1-104.0	104.1-105.0	105.1-106.0	106.1-107.0	107.1-108.0	108.1-109.0	109.1-110.0	110.1-111.0	111.1-112.0	112.1-113.0	113.1-114.0	114.1-115.0	115.1-116.0	116.1-117.0	117.1-118.0	118.1-119.0	119.1-120.0	120.1-121.0	121.1-122.0	122.1-123.0	123.1-124.0	124.1-125.0	125.1-126.0	126.1-127.0	127.1-128.0	128.1-129.0	129.1-130.0	130.1-131.0	131.1-132.0	132.1-133.0	133.1-134.0	134.1-135.0	135.1-136.0	136.1-137.0	137.1-138.0	138.1-139.0	139.1-140.0	140.1-141.0	141.1-142.0	142.1-143.0	143.1-144.0	144.1-145.0	145.1-146.0	146.1-147.0	147.1-148.0	148.1-149.0	149.1-150.0	150.1-151.0	151.1-152.0	152.1-153.0	153.1-154.0	154.1-155.0	155.1-156.0	156.1-157.0	157.1-158.0	158.1-159.0	159.1-160.0	160.1-161.0	161.1-162.0	162.1-163.0	163.1-164.0	164.1-165.0	165.1-166.0	166.1-167.0	167.1-168.0	168.1-169.0	169.1-170.0	170.1-171.0	171.1-172.0	172.1-173.0	173.1-174.0	174.1-175.0	175.1-176.0	176.1-177.0	177.1-178.0	178.1-179.0	179.1-180.0	180.1-181.0	181.1-182.0	182.1-183.0	183.1-184.0	184.1-185.0	185.1-186.0	186.1-187.0	187.1-188.0	188.1-189.0	189.1-190.0	190.1-191.0	191.1-192.0	192.1-193.0	193.1-194.0	194.1-195.0	195.1-196.0	196.1-197.0	197.1-198.0	198.1-199.0	199.1-200.0	200.1-201.0	201.1-202.0	202.1-203.0	203.1-204.0	204.1-205.0	205.1-206.0	206.1-207.0	207.1-208.0	208.1-209.0	209.1-210.0	210.1-211.0	211.1-212.0	212.1-213.0	213.1-214.0	214.1-215.0	215.1-216.0	216.1-217.0	217.1-218.0	218.1-219.0	219.1-220.0	220.1-221.0	221.1-222.0	222.1-223.0	223.1-224.0	224.1-225.0	225.1-226.0	226.1-227.0	227.1-228.0	228.1-229.0	229.1-230.0	230.1-231.0	231.1-232.0	232.1-233.0	233.1-234.0	234.1-235.0	235.1-236.0	236.1-237.0	237.1-238.0	238.1-239.0	239.1-240.0	240.1-241.0	241.1-242.0	242.1-243.0	243.1-244.0	244.1-245.0	245.1-246.0	246.1-247.0	247.1-248.0	248.1-249.0	249.1-250.0	250.1-251.0	251.1-252.0	252.1-253.0	

HEIGHT(METERS)		PERIOD(SECONDS)						TOTAL			
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.4	15.4-18.1	18.2-22.2	22.3-LONGER	
5.5-5.9	0	0	0	0	0	0	0	0	0	0	0
5.0-5.4	0	0	0	0	0	0	0	0	0	0	0
4.5-4.9	0	0	0	0	0	0	0	0	0	0	0
4.0-4.4	0	0	0	0	0	0	0	0	0	0	0
3.5-3.9	0	0	0	0	0	0	0	0	0	0	0
3.0-3.4	0	0	0	0	0	0	0	0	0	0	0
2.5-2.9	0	0	0	0	0	0	0	0	0	0	0
2.0-2.4	0	0	0	0	0	0	0	0	0	0	0
1.5-1.9	0	0	0	0	0	0	0	0	0	0	0
1.0-1.4	0	0	0	0	0	0	0	0	0	0	0
0.5-0.9	0	0	0	0	0	0	0	0	0	0	0
0.0-0.4	0	0	0	0	0	0	0	0	0	0	0
TOTAL	278	632	269	49	13	6	0	0	0	0	738
MEAN HS(M) = 2.06	LARGEST HS(M) = 5.14		MEAN TP(SEC) = 7.1		NUMBER OF CASES =						

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.0	0	0	0	0	0	0	0	0	0	0	861
0.1	0	0	0	0	0	0	0	0	0	0	128
0.2	0	0	0	0	0	0	0	0	0	0	38
0.3	0	0	0	0	0	0	0	0	0	0	55
0.4	0	0	0	0	0	0	0	0	0	0	22
0.5	0	0	0	0	0	0	0	0	0	0	11
0.6	0	0	0	0	0	0	0	0	0	0	3
0.7	0	0	0	0	0	0	0	0	0	0	0
0.8	0	0	0	0	0	0	0	0	0	0	0
0.9	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	641	457	52	8	0	0	0	0	0	0	682
MEAN HS(M) = 0.49	LARGEST HS(M) = 3.19				MEAN TP(SEC) = 5.9		NUMBER OF CASES =			682	

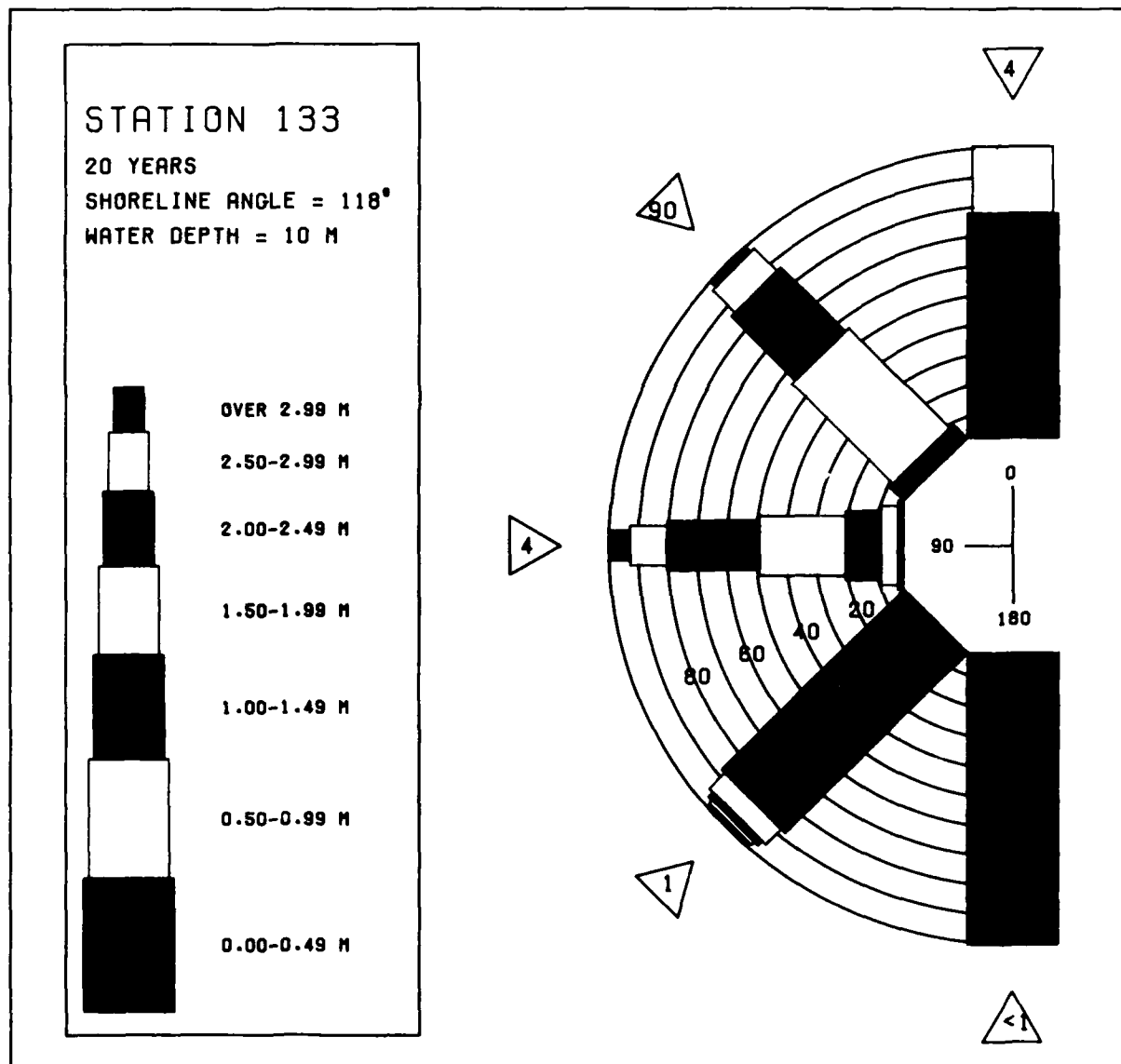
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HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	0
0.1	0
0.2	0
0.3	0
0.4	0
0.5	0
0.6	0
0.7	0
0.8	0
0.9	0
1.0	0
1.1	0
1.2	0
1.3	0
1.4	0
1.5	0
1.6	0
1.7	0
1.8	0
1.9	0
2.0	0
2.1	0
2.2	0
2.3	0
2.4	0
2.5	0
2.6	0
2.7	0
2.8	0
2.9	0
3.0	0
3.1	0
3.2	0
3.3	0
3.4	0
3.5	0
3.6	0
3.7	0
3.8	0
3.9	0
4.0	0
4.1	0
4.2	0
4.3	0
4.4	0
4.5	0
4.6	0
4.7	0
4.8	0
4.9	0
5.0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0
MEAN HS(M) = 0.	LARGEST HS(M) = 0.		ME								

PHASE 3 ST. 133 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
 LAT. LONG. START = 34.60N/120.71W LAT. LONG. END = 34.53N/120.60W
 SHORELINE ANGLE = 118.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.4	15.4-18.2	18.2-22.3	22.3-LONGER	TOTAL
0.0-0.49	481	208	258	52	23	7	1	8	..	..	1030
0.50-0.99	595	263	281	66	800	411	359	23	..	..	2481
1.00-1.49	158	786	184	19	361	850	385	55	..	..	2837
1.50-1.99	21	174	118	13	37	215	459	62	..	..	1098
2.00-2.49	1	57	27	3	13	43	113	17	..	..	329
2.50-2.99	..	14	15	..	1	14	24	4	..	..	88
3.00-3.49	..	2	11	..	..	4	5	..	..	..	30
3.50-3.99	..	..	1	..	..	..	1	..	..	..	0
4.00-4.49	..	..	..	..	..	..	..	..	..	..	0
4.50-4.99	..	..	..	..	..	..	..	..	..	..	0
5.00+	..	..	..	..	..	1	..	..	..	..	0
TOTAL	1256	2204	1595	844	1236	1545	1047	169	0	0	58440

MEAN HS(M) = 1.02 LARGEST HS(M) = 5.14 MEAN TP(SEC) = 9.6 TOTAL CASES = 58440



MONTH

LARGEST HS(METERS) BY MONTH AND YEAR

WIS STATION 133 (34.60N/ 120.71W TO 34.53N/ 120.60W)

MONTH

20 YR. STATISTICS FOR PACIFIC STATION133 (34.60N/ 120.71W TO 34.53N/ 120.60W)

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 1.0
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 6.0
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 1.0
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 3.0
LARGEST WAVE HS . . . . . (METERS) 1.1
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 11.0
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 94.0
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) 59021609

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PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 0 - 14.9
 LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	1	0	0	0	0	0	0	0	0	0	
0.1	0	0	0	0	0	0	0	0	0	0	
0.2	0	0	0	0	0	0	0	0	0	0	
0.3	0	0	0	0	0	0	0	0	0	0	
0.4	0	0	0	0	0	0	0	0	0	0	
0.5	0	0	0	0	0	0	0	0	0	0	
0.6	0	0	0	0	0	0	0	0	0	0	
0.7	0	0	0	0	0	0	0	0	0	0	
0.8	0	0	0	0	0	0	0	0	0	0	
0.9	0	0	0	0	0	0	0	0	0	0	
1.0	0	0	0	0	0	0	0	0	0	0	
TOTAL	1	0	0	0	0	0	0	0	0	1	

MEAN HS(M) = 0.01 LARGEST HS(M) = 0.01 MEAN TP(SEC) = 4.5 NUMBER OF CASES = 1

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 15.0 - 44.9
 LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	1	0	0	0	0	0	0	0	0	0	
0.1	0	0	0	0	0	0	0	0	0	0	
0.2	0	0	0	0	0	0	0	0	0	0	
0.3	0	0	0	0	0	0	0	0	0	0	
0.4	0	0	0	0	0	0	0	0	0	0	
0.5	0	0	0	0	0	0	0	0	0	0	
0.6	0	0	0	0	0	0	0	0	0	0	
0.7	0	0	0	0	0	0	0	0	0	0	
0.8	0	0	0	0	0	0	0	0	0	0	
0.9	0	0	0	0	0	0	0	0	0	0	
1.0	0	0	0	0	0	0	0	0	0	0	
TOTAL	5467	3871	6	0	0	0	0	0	0	0	

MEAN HS(M) = 1.35 LARGEST HS(M) = 2.99 MEAN TP(SEC) = 6.0 NUMBER OF CASES = 5465

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 45.0 - 74.9
 LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	1	0	0	0	0	0	0	0	0	0	
0.1	0	0	0	0	0	0	0	0	0	0	
0.2	0	0	0	0	0	0	0	0	0	0	
0.3	0	0	0	0	0	0	0	0	0	0	
0.4	0	0	0	0	0	0	0	0	0	0	
0.5	0	0	0	0	0	0	0	0	0	0	
0.6	0	0	0	0	0	0	0	0	0	0	
0.7	0	0	0	0	0	0	0	0	0	0	
0.8	0	0	0	0	0	0	0	0	0	0	
0.9	0	0	0	0	0	0	0	0	0	0	
1.0	0	0	0	0	0	0	0	0	0	0	
TOTAL	879	12750	17124	10883	15903	17716	11320	1750	28	0	

MEAN HS(M) = 1.85 LARGEST HS(M) = 6.34 MEAN TP(SEC) = 10.7 NUMBER OF CASES = 51654

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
 WAVE APPROACH ANGLE(RELATIVE TO SHORELINE IN DEGREES)= 75.0 - 104.9
 LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
 SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
 PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	TOTAL
0.0	1	0	0	0	0	0	0	0	0	0	
0.1	0	0	0	0	0	0	0	0	0	0	
0.2	0	0	0	0	0	0	0	0	0	0	
0.3	0	0	0	0	0	0	0	0	0	0	
0.4	0	0	0	0	0	0	0	0	0	0	
0.5	0	0	0	0	0	0	0	0	0	0	
0.6	0	0	0	0	0	0	0	0	0	0	
0.7	0	0	0	0	0	0	0	0	0	0	
0.8	0	0	0	0	0	0	0	0	0	0	
0.9	0	0	0	0	0	0	0	0	0	0	
1.0	0	0	0	0	0	0	0	0	0	0	
TOTAL	103	408	345	213	200	318	245	102	31	0	

MEAN HS(M) = 2.49 LARGEST HS(M) = 5.20 MEAN TP(SEC) = 10.5 NUMBER OF CASES = 1167

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES) = 105.0 - 134.9
LAT. LONG. START = 34.53N/120.60W LAT. LONG. END = 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)		PERIOD(SECONDS)										TOTAL
		4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0	0	1	6	.	.	.	.	.	.	7
0.5	-	0	1	1	.	.	.	.	.	.	.	1
1.0	-	0	0	0	.	.	.	.	.	.	.	0
1.5	-	0	0	0	.	.	.	.	.	.	.	0
2.0	-	0	0	0	.	.	.	.	.	.	.	0
2.5	-	0	0	0	.	.	.	.	.	.	.	0
3.0	-	0	0	0	.	.	.	.	.	.	.	0
3.5	-	0	0	0	.	.	.	.	.	.	.	0
4.0	-	0	0	0	.	.	.	.	.	.	.	0
4.5	-	0	0	0	.	.	.	.	.	.	.	0
5.0	-	0	0	0	.	.	.	.	.	.	.	0
5.5	-	0	0	0	.	.	.	.	.	.	.	0
6.0	-	0	0	0	.	.	.	.	.	.	.	0
6.5	-	0	0	0	.	.	.	.	.	.	.	0
7.0	-	0	0	0	.	.	.	.	.	.	.	0
7.5	-	0	0	0	.	.	.	.	.	.	.	0
8.0	-	0	0	0	.	.	.	.	.	.	.	0
8.5	-	0	0	0	.	.	.	.	.	.	.	0
9.0	-	0	0	0	.	.	.	.	.	.	.	0
9.5	-	0	0	0	.	.	.	.	.	.	.	0
10.0	-	0	0	0	.	.	.	.	.	.	.	0
10.5	-	0	0	0	.	.	.	.	.	.	.	0
11.0	-	0	0	0	.	.	.	.	.	.	.	0
11.5	-	0	0	0	.	.	.	.	.	.	.	0
12.0	-	0	0	0	.	.	.	.	.	.	.	0
12.5	-	0	0	0	.	.	.	.	.	.	.	0
13.0	-	0	0	0	.	.	.	.	.	.	.	0
13.5	-	0	0	0	.	.	.	.	.	.	.	0
14.0	-	0	0	0	.	.	.	.	.	.	.	0
14.5	-	0	0	0	.	.	.	.	.	.	.	0
15.0	-	0	0	0	.	.	.	.	.	.	.	0
15.5	-	0	0	0	.	.	.	.	.	.	.	0
16.0	-	0	0	0	.	.	.	.	.	.	.	0
16.5	-	0	0	0	.	.	.	.	.	.	.	0
17.0	-	0	0	0	.	.	.	.	.	.	.	0
17.5	-	0	0	0	.	.	.	.	.	.	.	0
18.0	-	0	0	0	.	.	.	.	.	.	.	0
18.5	-	0	0	0	.	.	.	.	.	.	.	0
19.0	-	0	0	0	.	.	.	.	.	.	.	0
19.5	-	0	0	0	.	.	.	.	.	.	.	0
20.0	-	0	0	0	.	.	.	.	.	.	.	0
20.5	-	0	0	0	.	.	.	.	.	.	.	0
21.0	-	0	0	0	.	.	.	.	.	.	.	0
21.5	-	0	0	0	.	.	.	.	.	.	.	0
22.0	-	0	0	0	.	.	.	.	.	.	.	0

PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES)= 135.0 - 164.9
LAT. LONG. START= 34.53N/120.60W LAT. LONG. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

HEIGHT(METERS)	4.4- 6.0	6.1- 8.0	8.1- 9.5	9.6- 10.5	PERIOD(SECONDS)					TOTAL	
					10.6- 11.7	11.8- 13.3	13.4- 15.3	15.4- 18.1	18.2- 22.2	22.3- LONGER	
0.0	-	0									6
0.5	-	0									0
1.0	-	0									0
1.5	-	0									0
2.0	-	0									0
2.5	-	0									0
3.0	-	0									0
3.5	-	0									0
4.0	-	0									0
4.5	-	0									0
5.0	-	0									0
TOTAL	0	6	0	0	0	0	0	0	0	0	6
MEAN HS(M) = 0.26 LARGEST HS(M) = 0.37 MEAN TP(SEC) = 6.9 NUMBER OF CASES = 4											

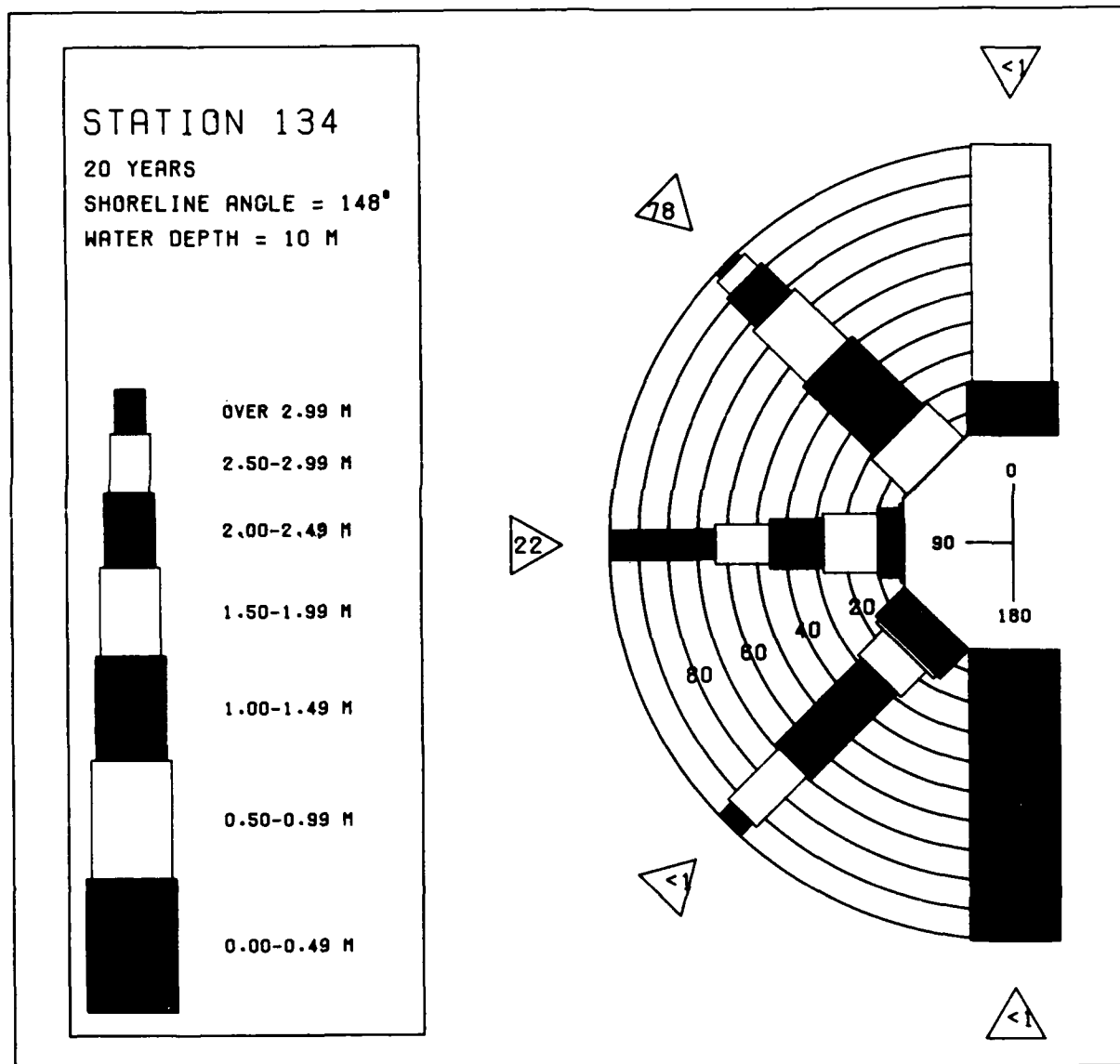
PHASE 3 ST. 134 20 YEAR WAVE DIRECTION STATISTICAL SUMMARY
WAVE APPROACH ANGLE (RELATIVE TO SHORELINE IN DEGREES)= 165.0 - 180.0
LAT. LONG. START= 34.53N/120.60W LAT. LONG. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X1000) OF HEIGHT AND PERIOD BY DIRECTION

[illegible]

PHASE 3 ST. 134 20 YEAR STATISTICAL SUMMARY FOR ALL DIRECTIONS
LAT. LON. START= 34.53N/120.60W LAT. LON. END= 34.43N/120.46W
SHORELINE ANGLE = 148.0 (DEG. AZ.) WATER DEPTH = 10.00 METERS
PERCENT OCCURRENCE(X100) OF HEIGHT AND PERIOD FOR ALL DIRECTIONS

HEIGHT(METERS)	PERIOD(SECONDS)										TOTAL
	4.4-6.0	6.1-8.0	8.1-9.5	9.6-10.5	10.6-11.7	11.8-13.3	13.4-15.3	15.4-18.1	18.2-22.2	22.3-LONGER	
0.50 - 0.49	84	292	670	201	98	33	8	.	.	.	23
1.00 - 0.99	377	504	657	226	513	200	35	4	1	.	1386
1.50 - 1.49	178	581	214	280	359	431	130	15	2	.	2817
2.00 - 1.99	5	277	111	75	316	518	178	17	.	.	2390
2.50 - 2.49	.	47	68	17	105	390	250	18	.	.	1497
3.00 - 2.99	.	2	16	6	13	168	252	18	.	.	895
3.50 - 3.49	.	.	1	1	2	44	190	3	.	.	475
4.00 - 3.99	.	.	.	.	.	12	82	3	.	.	272
4.50 - 4.49	.	.	.	.	.	1	21	3	.	.	118
5.00 +	.	.	.	.	.	2	6	3	.	.	52
TOTAL	645	1709	1755	1108	1608	1799	1152	180	3	0	58440

MEAN HS(M) = 1.82 LARGEST HS(M) = 6.34 MEAN TP(SEC) = 10.2 TOTAL CASES = 58440



MONTH

[illegible]

MONTH

[illegible]

20 YR. STATISTICS FOR PACIFIC STATION 134 (34.53N/ 120.60W TO 34.43N/ 120.46W)

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MEAN SIGNIFICANT WAVE HEIGHT . . . . . (METERS) 1.8
MEAN PEAK WAVE PERIOD . . . . . (SECONDS) 10.2
MOST FREQUENT 30.0 DEGREE (CENTER) DIRECTION BAND . . . (DEGREES) 60.0
STANDARD DEVIATION OF WAVE HS . . . . . (METERS) 0.8
STANDARD DEVIATION OF WAVE TP . . . . . (SECONDS) 2.7
LARGEST WAVE HS . . . . . (METERS) 6.3
WAVE TP ASSOCIATED WITH LARGEST WAVE HS . . . . . (SECONDS) 16.7
AVERAGE DIRECTION ASSOCIATED WITH LARGEST WAVE HS . . . (DEGREES) 72.1
DATE OF LARGEST HS OCCURRENCE IS (YR,MO,DA,HR) . . . . . 69122605

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Appendix F: Maximum Wave Height Return Period Table

Table F1
Maximum Significant Wave Height at Phase III
Stations for Various Return Periods

Station No.	Return Period, Years					
	21	10	7	5	3	1
1	7.5	7.3	7.3	7.3	6.7	6.5
2	7.3	7.2	7.0	6.7	6.6	6.4
3	7.5	7.3	7.3	7.3	6.7	6.6
4	7.6	7.5	7.4	7.4	7.2	6.6
5	7.7	7.7	7.4	7.4	7.1	6.7
6	7.4	7.3	7.2	7.1	7.0	6.5
7	7.7	7.6	7.4	7.3	7.1	6.6
8	6.9	6.9	6.8	6.8	6.7	6.3
9	7.0	7.0	6.7	6.7	6.5	6.2
10	7.0	6.9	6.8	6.8	6.5	6.2
11	7.0	6.9	6.8	6.8	6.5	6.2
12	7.0	6.9	6.8	6.7	6.6	6.2
13	7.0	6.9	6.8	6.7	6.6	6.2
14	7.3	7.3	7.3	7.3	7.0	6.6
15	7.4	7.3	7.2	7.2	7.1	6.6
16	7.2	7.1	6.9	6.8	6.6	6.3
17	7.1	7.0	6.9	6.8	6.6	6.2
18	7.2	7.1	6.9	6.8	6.6	6.3
19	7.5	7.3	7.2	7.2	6.9	6.6
20	7.5	7.2	7.2	7.2	6.9	6.6
21	7.3	6.9	6.9	6.7	6.6	6.3
22	7.1	6.9	6.8	6.8	6.5	6.3
23	7.4	7.1	7.0	6.8	6.6	6.3
24	7.3	6.9	6.9	6.7	6.6	6.3
25	7.4	7.2	7.1	6.9	6.8	6.5
26	7.4	7.2	7.2	7.0	6.9	6.5
27	7.4	7.3	7.2	6.9	6.9	6.6
28	7.4	7.2	7.1	6.9	6.8	6.5
29	7.2	6.9	6.8	6.8	6.6	6.3
30	7.2	6.9	6.8	6.8	6.6	6.3
31	7.3	7.2	7.2	7.2	6.8	6.5
32	7.3	7.2	7.2	7.0	6.8	6.5
33	7.3	7.2	7.2	7.1	6.8	6.5
34	7.2	7.2	7.0	7.0	6.9	6.6
35	7.3	7.3	7.3	7.1	7.0	6.6
36	7.3	7.3	7.2	7.1	7.0	6.6
37	7.2	7.2	7.1	7.1	6.9	6.6
38	7.2	6.8	6.8	6.7	6.6	6.3
39	7.2	6.9	6.8	6.7	6.6	6.4
40	7.5	7.2	7.2	7.1	6.8	6.5

(Continued)

(Sheet 1 of 4)

Table F1 (Continued)

Station No.	Return Period, Years					
	21	10	7	5	3	1
41	7.4	7.2	7.2	7.0	6.8	6.5
42	7.3	7.2	7.2	7.0	6.8	6.5
43	7.4	7.2	7.1	7.1	6.9	6.6
44	7.3	7.2	7.1	7.0	6.8	6.6
45	7.2	7.2	7.1	7.0	6.8	6.5
46	7.0	6.9	6.9	6.8	6.7	6.4
47	7.7	7.1	7.1	7.0	6.9	6.6
48	7.4	7.1	7.1	6.9	6.8	6.5
49	7.4	7.0	7.0	6.9	6.8	6.5
50	7.2	6.9	6.9	6.8	6.7	6.4
51	7.8	7.7	7.3	7.1	7.1	6.7
52	8.0	7.7	7.1	7.1	6.9	6.5
53	7.8	7.1	7.1	7.1	6.9	6.6
54	7.8	7.7	7.1	7.0	6.9	6.6
55	7.8	7.6	7.1	7.0	6.9	6.6
56	7.8	7.5	7.2	7.1	7.0	6.5
57	7.8	7.3	7.2	7.0	6.5	6.3
58	7.8	7.0	7.0	7.0	6.9	6.5
59	7.7	6.9	6.9	6.9	6.8	6.4
60	7.9	7.7	6.8	6.7	6.4	6.0
61	7.8	7.7	7.0	6.9	6.8	6.5
62	7.8	7.4	7.0	6.9	6.9	6.5
63	7.8	7.1	7.0	6.9	6.9	6.5
64	7.3	7.1	7.0	6.7	6.6	6.3
65	7.1	7.1	6.9	6.6	6.6	6.3
66	7.7	7.2	7.0	6.8	6.8	6.4
67	7.8	7.2	7.1	7.0	6.9	6.4
68	7.7	7.2	6.8	6.7	6.6	6.4
69	7.6	7.1	6.8	6.7	6.6	6.4
70	7.6	7.1	6.7	6.7	6.6	6.4
71	7.7	7.2	6.8	6.7	6.7	6.4
72	7.1	7.0	6.8	6.6	6.5	6.3
73	7.7	7.4	7.0	6.8	6.6	6.2
74	7.7	7.2	7.1	7.0	6.7	6.4
75	7.0	6.8	6.6	6.4	6.3	5.8
76	6.7	6.6	6.5	6.4	6.1	5.5
77	7.5	6.9	6.8	6.7	6.5	6.1
78	7.0	6.8	6.5	6.4	6.2	5.7
79	7.2	6.9	6.5	6.4	6.3	5.8
80	7.7	7.2	6.8	6.8	6.5	6.2

(Continued)

(Sheet 2 of 4)

Table F1 (Continued)

Station No.	Return Period, Years					
	21	10	7	5	3	1
81	7.7	7.2	6.9	6.8	6.5	6.2
82	7.2	7.2	6.9	6.8	6.4	6.2
83	7.2	7.2	6.9	6.8	6.4	6.2
84	7.4	7.2	6.8	6.5	6.4	6.2
85	7.4	7.1	6.5	6.4	6.2	6.0
86	7.4	7.4	7.2	6.6	6.6	6.3
87	7.4	7.1	6.9	6.8	6.6	6.3
88	7.0	6.9	6.8	6.5	6.1	5.6
89	6.9	6.8	6.1	5.9	5.8	5.2
90	6.9	6.9	6.3	6.0	5.8	5.3
91	6.9	6.9	6.3	6.1	5.8	5.3
92	6.3	6.3	5.9	5.7	5.2	4.6
93	6.8	6.6	6.6	6.6	6.1	5.7
94	7.0	6.9	6.8	6.6	6.5	6.2
95	6.7	6.6	6.5	6.4	6.0	5.5
96	7.0	6.8	6.7	6.6	6.4	6.2
97	7.0	6.6	6.6	6.6	6.5	6.2
98	5.1	5.0	4.9	4.8	4.1	3.3
99	6.3	5.6	5.2	5.0	4.8	4.1
100	5.0	5.0	4.9	4.8	4.1	3.3
101	6.2	6.0	5.6	5.2	4.9	4.5
102	7.0	6.9	6.6	6.5	6.3	6.1
103	6.9	6.8	6.6	6.6	6.5	6.2
104	7.0	6.9	6.6	6.6	6.4	6.1
105	7.0	6.9	6.6	6.4	6.2	5.9
106	7.3	6.9	6.8	6.7	6.5	6.1
107	7.1	7.0	6.6	6.4	6.2	5.9
108	6.5	6.3	6.1	5.7	5.4	4.9
109	6.5	5.7	5.6	5.6	5.0	4.5
110	5.3	5.2	4.3	4.0	4.0	3.2
111	6.4	6.3	6.0	5.8	5.3	4.6
112	7.1	6.8	6.8	6.6	6.4	6.0
113	6.6	6.5	6.5	6.4	6.2	6.0
114	7.1	6.9	6.6	6.4	6.2	6.0
115	7.2	6.9	6.8	6.6	6.4	6.0
116	5.4	5.4	5.4	5.1	4.6	4.0
117	5.6	5.5	5.4	5.4	4.5	4.0
118	6.6	6.6	6.4	6.3	6.0	5.3
119	6.5	6.3	6.2	6.1	5.9	5.1
120	6.5	6.2	5.9	5.9	5.5	4.6

(Continued)

(Sheet 3 of 4)

Table F1 (Concluded)

Station No.	Return Period, Years					
	<u>21</u>	<u>10</u>	<u>7</u>	<u>5</u>	<u>3</u>	<u>1</u>
121	6.6	6.6	6.6	6.4	6.1	5.9
122	5.5	4.4	4.4	4.2	3.7	3.0
123	6.6	6.4	6.2	6.1	6.0	5.2
124	5.7	5.6	5.4	5.2	5.0	4.2
125	5.5	4.4	4.4	4.2	3.6	3.0
126	6.7	6.4	6.4	6.4	6.2	6.0
127	5.6	5.5	5.5	4.8	4.5	3.8
128	5.5	4.4	4.3	4.2	3.5	2.9
129	6.7	6.7	6.6	6.4	6.2	6.0
130	5.7	5.3	5.3	5.0	4.8	4.1
131	6.7	6.5	6.5	6.3	6.2	6.0
132	6.7	6.5	6.4	6.3	6.2	6.0
133	5.1	4.9	4.9	4.0	3.8	3.4
134	6.3	6.1	6.1	6.0	5.9	5.1

(Sheet 4 of 4)